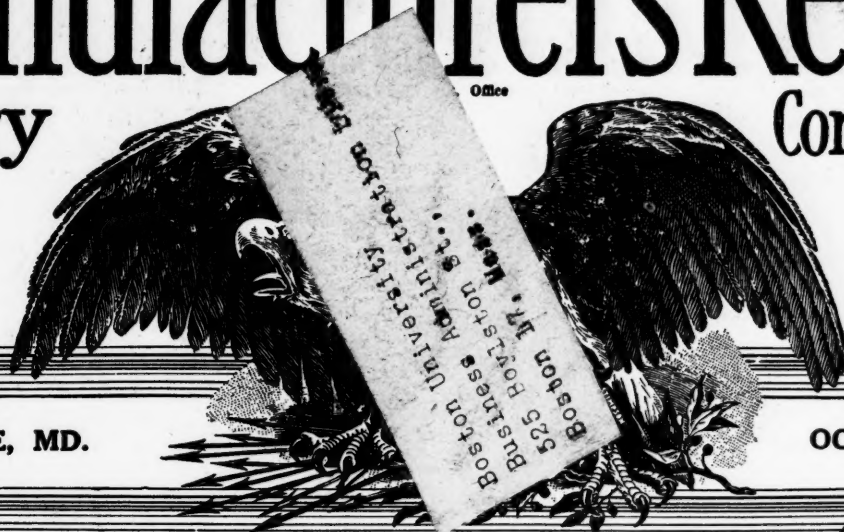


Manufacturers Record

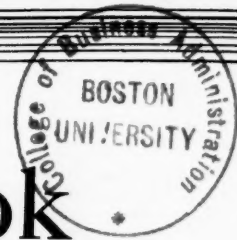
Industry Construction



BALTIMORE, MD.

OCTOBER 15, 1931

A Brighter Outlook



The prompt adoption of a plan to make available probably as much as \$1,500,000,000, which is the estimated amount of frozen assets tied up in American financial institutions, cannot be approved too strongly in principle. The working out of the details, as the press has carried the news from day to day during the past week, has already brought encouragement to the distressed American business mind. The further information is disclosed from Washington that this proposal is only one part of a comprehensive program which will include freeing a similar amount tied up in distressed real estate, while it is hoped that the estimated \$800,000,000 in cash, which is believed to have been hoarded in recent months will, with restored confidence, be replaced in banks and the channels of trade.

The inflation that will naturally follow such a constructive move is recognized, and may well be regarded as desirable and necessary. In the present state of affairs any proper measure that brings new life to the banking and business body, lifting it from despair, is bound to be inflationary to that extent. The effect of the President's proposal insures a clearer recognition of intrinsic values, which of late have not received their just due. Securities on our exchanges in some instances have sold for a price less than the cash and bonds the companies back of them have in their vaults.

This definitely constructive effort of the President of the United States to turn the tide of depression has met with virtually unanimous approval.

The Manufacturers Record is editorially, in this issue, pointing out the tremendous buying power which relief to the railroads will release. This is a question that deserves the sympathetic interest of the American public and prompt attention by the American Government.

A DEALER ORGANIZATION THAT IS

NATIONAL IN SCOPE

PLEDGED TO OFFER
SALES AND ENGIN-
EERING SERVICE TO
YOU AT ALL TIMES



SUPERIOR STATIONARY DIESEL ENGINES

Balzer Machinery Co.,	Portland, Oregon
Briggs-Weaver Machinery Co.,	Dallas, Texas
J. M. Dutton Foundry & Machine Works,	Vicksburg, Miss.
The Gebhardt Co., Inc.,	Chicago, Illinois
General Machinery Co.,	Spokane, Washington
Hendrie & Bolthoff,	Denver, Colorado
Kent-Ervin Engineering Co.,	Minneapolis, Minn.
King-Knight Co.,	San Francisco, California
Joe Lyons Machinery Co.,	Little Rock, Arkansas
T. McAvity & Sons, Ltd.,	St. John, New Brunswick



W. B. Moriarty Co., Ltd.,	Halifax, Nova Scotia
The National Supply Co. of Calif.,	Los Angeles, Calif.
Northern Road Equipment Co.,	Portland, Me.
Northwest Machinery Co.,	Boise, Idaho
The Otto Engine Works,	Holmesburg, Philadelphia, Pa.
Smith-Meeker Engineering Co.,	New York, N. Y.
Stewart Machinery Co., Inc.,	St. Louis, Missouri
Terry, Cowan & Smith, Inc.,	Kansas City, Missouri
Vermeersch, Inc.,	Phoenix, Arizona
The Wheelock Co.,	Cedarhurst, L. I., N. Y.

» Bulletin No. 120-MR giving complete information sent on request «

SUPERIOR ENGINE COMPANY
SPRINGFIELD, OHIO

Entered as second-class matter at the Postoffice, Baltimore, Md., under the act of March 3, 1879. Vol. C, No. 16, weekly.

This roof protects top floor tenants

DOES YOURS ?



IT WILL...IF YOU
INSULATE THE
ROOF WITH
ARMSTRONG'S
TEMLOK—THE
PERMANENT
INSULATION

"Keep the top floor comfortable," was the demand. So the roof of the New York World Telegram Building, N. Y. C., is insulated with 21,000 sq. ft. of 1"-thick Armstrong's Temlok. Architect—Howell & Thomas, Cleveland.

IF top-floor offices are vacant, the building owner loses money. But these offices needn't be vacant—if they are comfortable. And they can be comfortable. Just insulate at the roof with Armstrong's Temlok, the new, improved, low-cost fibreboard.

With Armstrong's Temlok, your roof will give top-floor offices life-

time protection. And you'll save fuel dollars every year. Tests show that $\frac{1}{3}$ of the heat generated by the furnace of an ordinary building escapes through an uninsulated roof. Check that escaping heat by insulating at the roof with Temlok and you'll use about $\frac{1}{4}$ less fuel to do the same work.

So Temlok is the logical roof-insulation choice. For Armstrong's Temlok gives permanent insulation. This board is made from the heartwood of southern pine. Its resin-impregnated fibres are strong,

sturdy, and resistant to moisture. Therefore Temlok on the roof of your building stays efficient as long as the building stands, saving you money all the time.

Pay extra for Temlok? Not one additional penny. Actually Armstrong's Temlok costs surprisingly little. We will gladly give you complete facts about Temlok—a sample if you wish. Just fill out the coupon. Armstrong Cork & Insulation Company, 944 Concord St., Lancaster, Pennsylvania.

Armstrong's
(A)
Product



ARMSTRONG CORK & INSULATION CO.
944 Concord St., Lancaster, Pa.

Please send me your illustrated booklet describing Temlok, the new, low-cost insulating fibreboard that will help me cut my fuel bills.

☐ Please send sample.

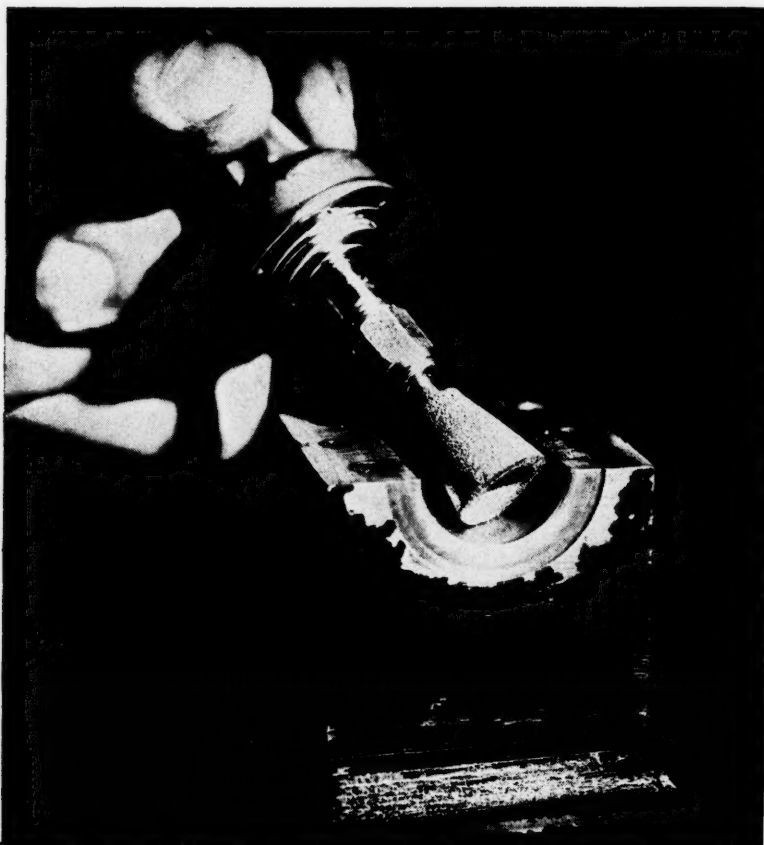
Name.....

Street.....

City.....

State.....

NEW



The "ALOXITE" BRAND REG. U. S. PAT. OFF. Production Set Mounted Wheels and Points . . .

EVERY practical shape and size that you need for your portable grinder is in this set.

Every wheel and point in the right grit and grade for the speedy, adequate removal of stock and the production of a good finish.

Secure, safe, true mounting (patent applied for) on copper coated rust proof spindles.

No need now to stock a wide variety of shapes and sizes—the new Production Set meets the general grinding needs of all types of portable grinders.

Made of Aloxite Brand Aluminum Oxide these wheels and points cut clean—with speed—keep sharp with less dressing—hold their shape—show long life.

Send for illustrated circular giving full details.



THE CARBORUNDUM COMPANY, Niagara Falls, N. Y.

REG. U. S. PAT. OFF.

CANADIAN CARBORUNDUM CO., LTD., NIAGARA FALLS, ONT.

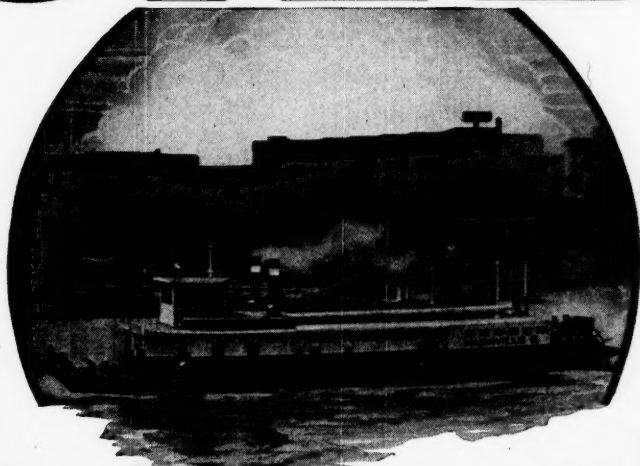
Sales Offices and Warehouses in New York, Chicago, Boston, Philadelphia, Cleveland, Detroit, Cincinnati, Pittsburgh, Milwaukee, Grand Rapids, Toronto, Ont.
The Carborundum Co., Ltd., Manchester, England

Deutsche Carborundum Werke, Reisholz bei Dusseldorf, Germany

(CARBORUNDUM AND ALOXITE ARE REGISTERED TRADE MARKS OF THE CARBORUNDUM COMPANY)

STEEL

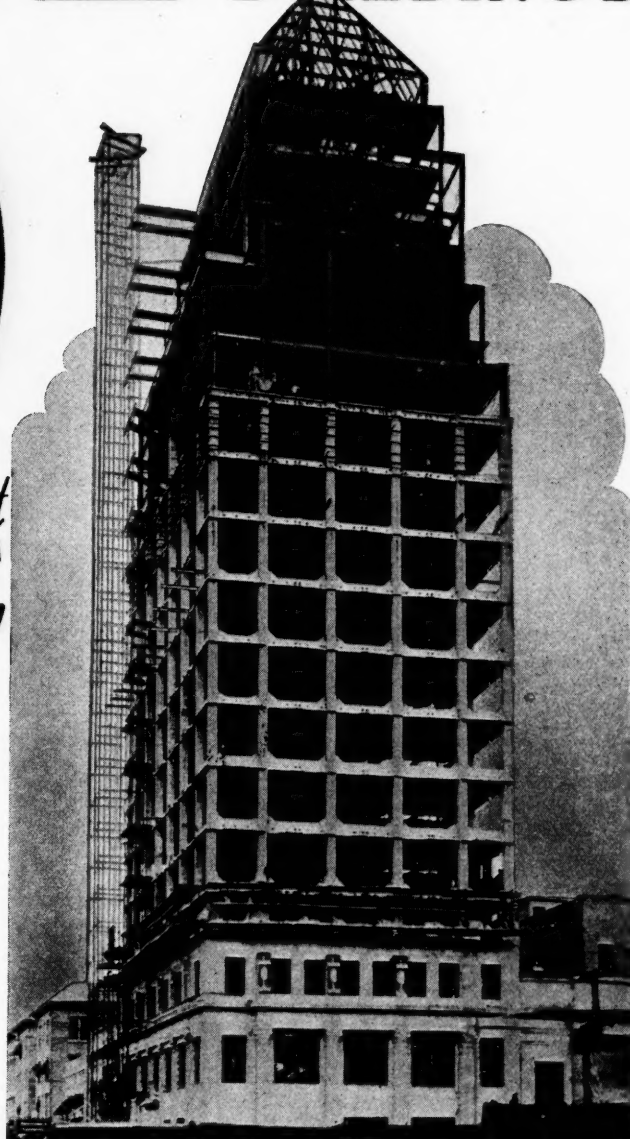
FOR BOATS
BRIDGES OR
BUILDINGS



Wherever there is a use for steel—Let
TENNESSEE

figure on your requirements. Quality products backed by careful inspection—prompt shipments, with intelligent cooperation through understanding of the customer's needs—these are some of the reasons which make Tennessee a desirable source of supply.

Products: Structural Shapes, Plates, Bars and Small Shapes, Sheets (Blue Annealed, Black and Galvanized), Rails and Accessories, Forgings, Castings, Semi-Finished Products, Pig Iron.



Tennessee Coal, Iron & Railroad Co.

General Offices: Brown-Marx Bldg., BIRMINGHAM, ALA.

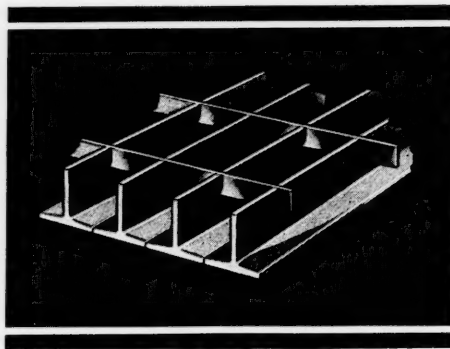
Subsidiary of United States Steel Corporation



for BRIDGE FLOORS

T-TRI-LOK efficiently and economically solves the modern bridge floor problem. Fireproof, light in weight, easily installed, adequately strong, permanent, T-TRI-LOK provides a roadway surface which meets all requirements of present-day vehicular traffic.

T-TRI-LOK is a new form of slab construction made up of structural tees mechanically interlocked with flat bars. Standard units, ready to install, are furnished in widths up to 4 feet and in lengths up to 30 feet. Various sizes of tees and cross bars are available, depending on strength of floor required.



T-TRI-LOK units are placed directly on bridge stringers and secured by bolting, riveting, welding or clipping. The cells are then filled flush with concrete, preferably vibrated into place, forming an armored concrete, non-skid wearing surface of long life and high efficiency. No forms for concrete are re-

quired. If desired, an additional wearing surface of concrete, asphalt or other suitable material may be added above the top of the steel.

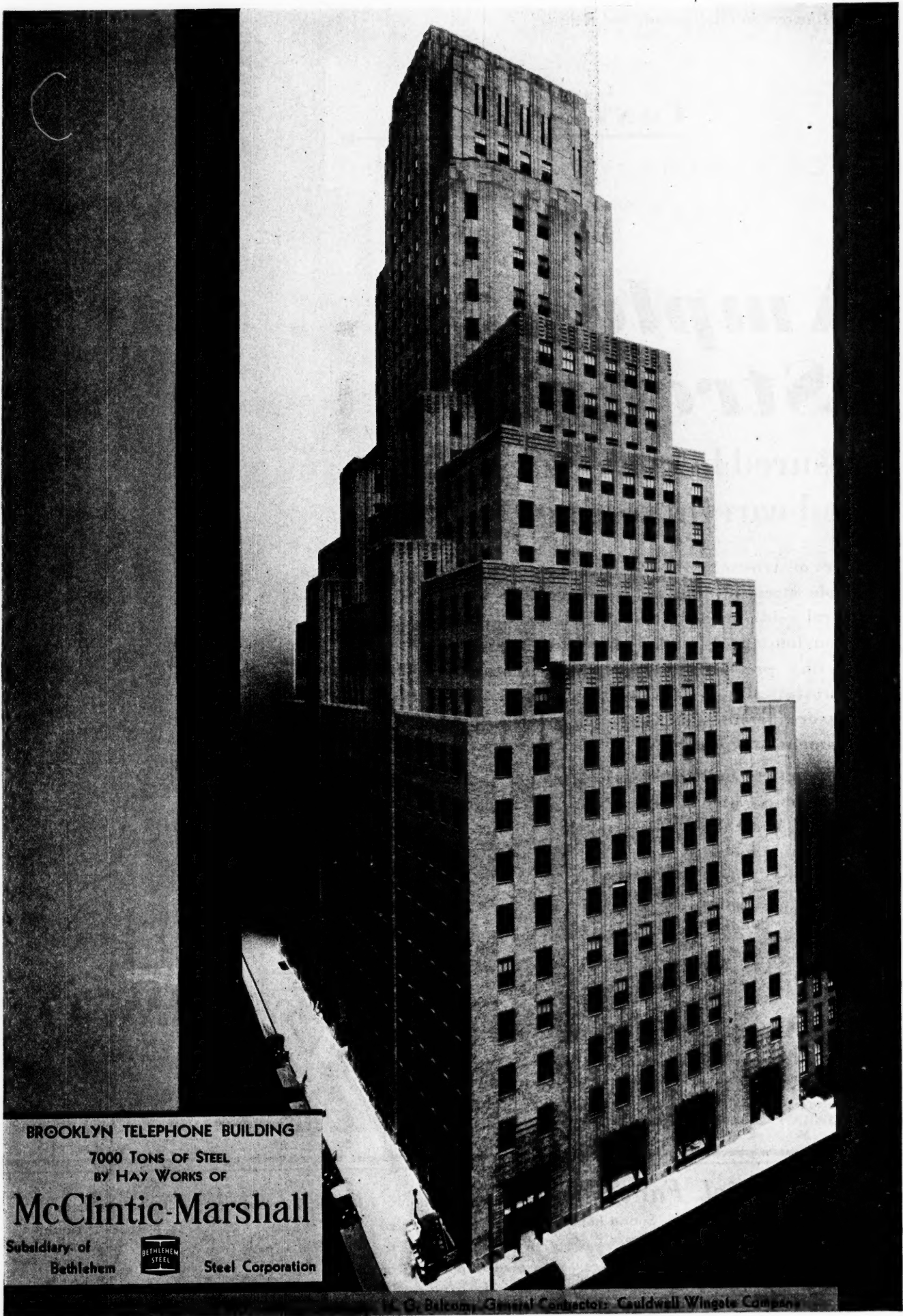
Send for booklet, "T-TRI-LOK Bridge Floor Construction." Carnegie engineers are also at your service.

CARNEGIE STEEL COMPANY • PITTSBURGH, PA.

Subsidiary of United States Steel Corporation

155

T-TRI-LOK



BROOKLYN TELEPHONE BUILDING
7000 TONS OF STEEL
BY THE WORKS OF
McClintic-Marshall
Subsidiary of
Bethlehem Steel Corporation

J. G. Balcom, General Contractor; Cauldwell-Wingate Company

"Pioneers in Continuous Sheet Rolling"

MADE BY
CONTINUOUS
PROCESS

Ample Strength

assured by *correct design*
and careful testing

Users of Armco Spiral Welded Pipe are assured ample strength, not only because the tough helical weld provides evenly distributed strength throughout each section, but also because of exacting pressure testing. Each section is hydrostatically tested to twice the required pressure before it is coated and released for shipment to buyers.

Strength is built in—by the use of true-gage coiled plate, welded helically into dense, firm seams. And these welds are raised slightly on the outside for greater rigidity. Yet the interior of Armco Spiral Welded Pipe is uniformly smooth and round.

Tell us of your requirements, and we shall be glad to send you complete information. Simply address the office nearest you.

The American Rolling Mill Co.

Executive Offices: MIDDLETOWN, OHIO
Export: The Armco International Corporation

DISTRICT OFFICES: Chicago • Cincinnati • Cleveland • Detroit
New York • Philadelphia • Pittsburgh • St. Louis • San Francisco



Quick Facts:

No surplus metal	Smooth interior	Round and straight	Light and strong
Sound helical welds	Uniform wall thickness	40 ft. lengths or more	
Diameters 6" to 24"	Wall thickness $\frac{7}{8}$ " to $\frac{1}{4}$ "	Ingot Iron or Steel	
Mill-coated, asphalt-dipped, galvanized or leadized			

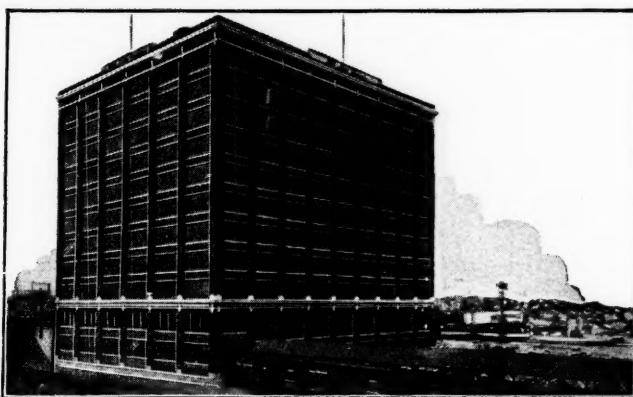
L. SONNEBORN SONS, Inc.

GUARANTEED PRODUCTS

No More Crumbling Concrete Floors If You Harden Them With

LAPIDOLITH

TRADE MARK



The picture at left is the Ford Motor Co., Minneapolis. Lapidolith used on all floors. This is only one of the many Ford plants treated with Lapidolith.

YOU KNOW the trouble with concrete floors unless they are specially hardened. They wear down. They crumble. The dust endangers health and damages goods and machinery.

Lapidolith, the original liquid concrete floor hardener, ends these troubles once and for all. This penetrating liquid compound works deep into the pores of cement and binds the loose particles into a close-grained mass that is granite-hard. Makes floors wearproof, dustproof, waterproof for life.

Any of your workmen can apply Lapidolith with a long-handled brush, or you can have the work done by a trained Sonneborn service crew. It goes on like water and hardens over-night. No interference with your work.

More than a billion square feet of concrete floors have been hardened by Lapidolith—in factories, office structures, stores and institutions—in scores of the most outstanding plants in America. We will gladly refer you to floors in your community which, after Lapidolith treatment, have remained hard and smooth under grinding wear for years.

Remember, Lapidolith is not a mere accelerator for densifying concrete. Its effect is *permanent*—guaranteed to make good on every job. Easily pays for its moderate cost in saving you from floor-patching and dust damage to goods and machinery. Write today for literature and samples.

B. S. PEARSON BUTTER CO. MANUFACTURERS ELGIN, ILL. January 30, 1928	
L. Sonneborn Sons Co. 114 - 5th Ave. New York, New York	
Gentlemen: We have used Lapidolith in the construction of buildings three separate times. The first were put down with Lapidolith was completed in 1916 and it is part of our steamship factory. We operate steel shelved tank trunks, carrying loads of about twenty-five hundred pounds met over these floors continuously. The floors are still in good condition and have never been dusty. Our second use of Lapidolith was in warehouse floors, put in about seven years ago. They are still in good condition. Two years ago we put in more floors with Lapidolith and, of course, these floors are still so new they do not show the slightest signs of wear. We are glad to communicate this information to you in order that you may have the credit due an excellent product. Yours very truly B. S. PEARSON BUTTER CO. 	

Some Other Sonneborn Products

LIGNOPHOL

Wood floor preservative. Prevents floors from rotting, splintering or drying out. Penetrates wood with life-giving gums and oils. Makes floors tough, smooth, attractive, sanitary.

HYDROCIDIC COLORLESS

Waterproofing for exposed exterior walls. Does not leave a surface film, but carries waterproofing material into brick, stone or cement, caulking pores against the elements.

CEMCOAT FLOOR ENAMEL

For all types of floors where a lasting, attractive finish is desired. Produces dustless, sanitary surface with a high gloss. Made in variety of colors.

MAINTENANCE PAINTS

For All Purposes

Complete line for exterior and interior surfaces of plants and factories and for machinery, boilers, tanks, stacks, etc. Each specially made for its purpose.

L. SONNEBORN SONS, Inc.

114 FIFTH AVENUE, NEW YORK

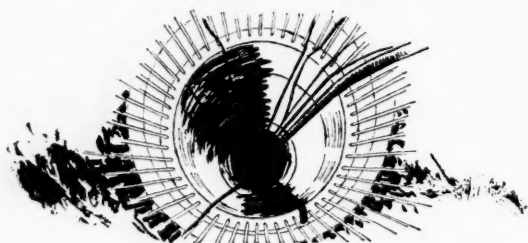
What is *Your*

There is a du Pont Explosive



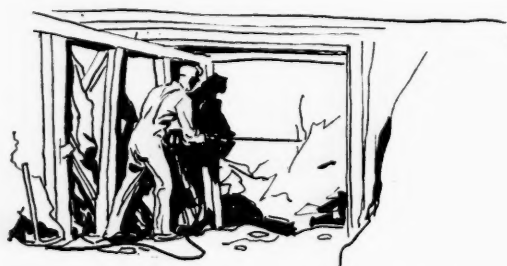
QUARRYING

For shale and soft limestone, first choices are du Pont Extra and Red Cross Extra. Durox is second. For granite and hard limestone, first choice is du Pont Quarry Gelatin. Second choice—du Pont Gelatin or Special Gelatin.



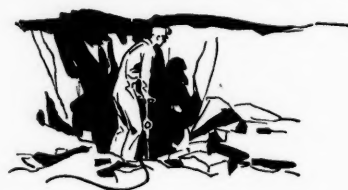
TUNNELS and DRIFTS

Several explosives are recommended for blasting tunnels and drifts. Du Pont Gelatin and Special Gelatin are recommended as firsts. For hardest rock only, use Blasting Gelatin. For tunnels in coal mines, use the Permissible, Gelobel. Red Cross Extra may also be used in blasting tunnels.



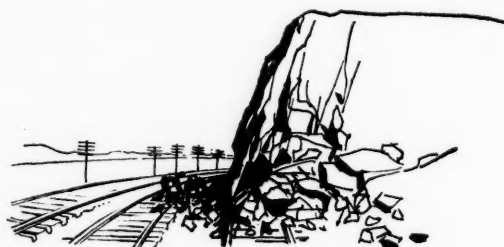
COAL MINING

Whatever the type of coal seam—whether your mine is gaseous or non-gaseous—you can use du Pont Explosives with assurance of satisfactory execution and good lump coal. Du Pont offers a complete series of Permissibles and Pellet Powders.



ORE MINING (Underground)

Du Pont Gelatin and du Pont Special Gelatin—The first is particularly good for work under high water pressure. The second is the standard explosive for shaft sinking. Both are used for hard ore. The du Pont Extras and Durox are also used.



ROADS and RAILROADS

The best all-around explosive for this type of work is Red Cross Extra. For very hard rock only, first choice is du Pont Quarry Gelatin. Second choice is du Pont Gelatin or du Pont Special Gelatin. First choice for deep sprung holes, soft material, is granular Blasting Powder.



FILL SETTLEMENT

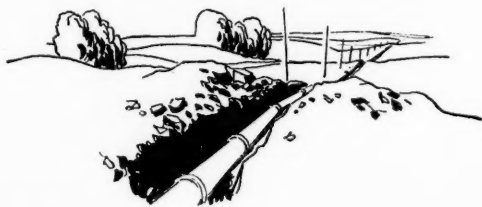
First choice for this type of work is du Pont Gelatin, which has maximum of plasticity and water resistance and gives off minimum of fumes. Du Pont Special Gelatin may also be used where there is less water.



REG. U. S. PAT. OFF.

BLASTING JOB?

made especially for it



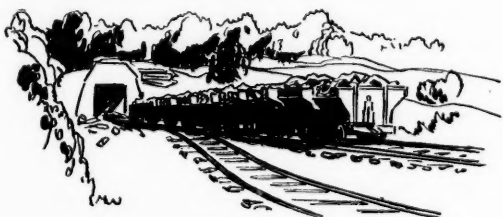
TRENCHES FOR PIPE LINES, WATER MAINS AND SEWERS

For general work of this type, Red Cross Extra is recommended as first choice. First choice for hard rock is du Pont Special Gelatin; second choice, du Pont Gelatin.



GYPSUM MINING

For first choice, either du Pont Gelatin or du Pont Special Gelatin, or Gypsum A (manufactured for this purpose only), and 20% L. D. Straight. Others that can be used are Durox, the du Pont Extras, Blasting Powder—and in some instances the du Pont Permissibles, Duobel and Monobel No. 8.



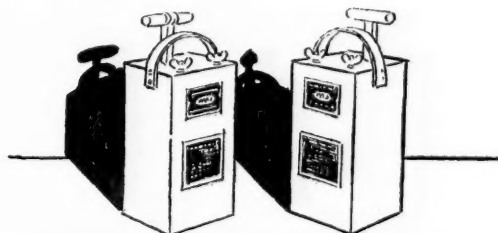
CLAY MINING

For either open or underground clay mining, Durox is recommended. It has low density and high velocity, gives off minimum of fumes, and is economical to use on account of its high cartridge count. Others that can be used are Red Cross Extra, du Pont Extra and Blasting Powder.



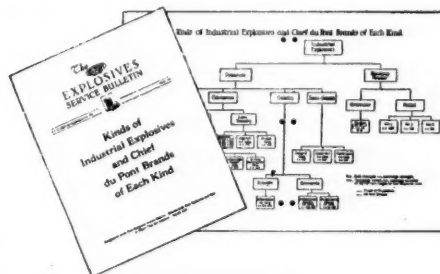
SUBMARINE BLASTING

For this type of work du Pont Gelatin is recommended for first choice; for very hard rock, Blasting Gelatin. In many instances, du Pont Special Gelatin and Quarry Gelatin can be used.



BLASTING ACCESSORIES

To fire the different explosives in the great variety of ways in which they are loaded, requires efficient blasting accessories. The du Pont Company makes a complete line of these. Specify du Pont Blasting Accessories when you order explosives.



• WRITE •

Write for Explosives Service Bulletin, "Brands of du Pont Explosives and Uses to Which They Are Adapted," giving a list of du Pont Explosives available for efficient and economical blasting operations.

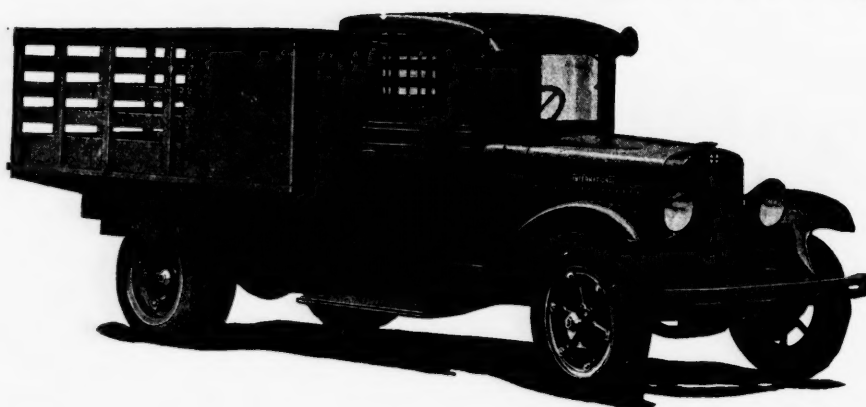
E. I. DU PONT DE NEMOURS & CO., Inc.

Explosives Department

Wilmington, Delaware

International Quality Trucks

—in the low price range!



New Model A-2, a 1½-ton 4-speed International. The price of the 136-inch wheel-base chassis with standard equipment is

\$675

f. o. b. factory

IN the building of high-grade motor trucks, International Harvester has advanced by what may well be called "leaps and bounds." Today this Company ranks high among the leaders in truck manufacture, making both speed and heavy-duty models for all hauling requirements. Three-fourths of the huge annual output of International Trucks is sold to industry and commerce, one-fourth to agriculture.

International Truck success is based on true quality, demonstrated economy and lasting satisfaction—and on SERVICE.

The largest Company-owned truck service organization in the world stands back of International Truck operation. Branches at 183 points in the United States and Canada, supplemented by thousands of dealers, provide a service that is of extreme value to the International owner. Whether

he is in Syracuse or San Diego, in Seattle or Savannah, the same complete stocks, the same modern equipment for repairs and overhauling, the same expert attention at lowest costs are at his service at a neighboring International branch.

TODAY'S official new-truck registration figures indicate that International is increasing its leadership in truck manufacture and sales during 1931—growing tribute to these trucks and this service.

The full line of modern International trucks, of handsome design, and with absolutely no sacrifice in quality, is now available with a low schedule of prices made possible by quantity production.

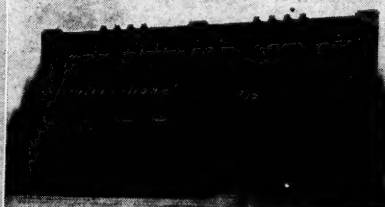
Ask for a demonstration of the 1½-ton Model A-2 featured above, or any other International. Sizes range from ¾-ton to 5-ton.

BALTIMORE or BAKERSFIELD

International branches are established to stay. We may relocate to better the service, but we have never abandoned a territory. A view of the interior of one factory-standard service branch, in small town or large, is a view into them all—183 Company-owned International branches. And in-between are hundreds of International Truck dealers, with service ideals patterned after our own. The object of them all is to keep Internationals on the job at low cost—to keep International owners content with their trucks.



The International Branch at Baltimore, Md.



The International Dealer (A. H. Karpe) at Bakersfield, Calif.

INTERNATIONAL HARVESTER COMPANY
606 S. Michigan Ave. OF AMERICA
(INCORPORATED) Chicago, Illinois

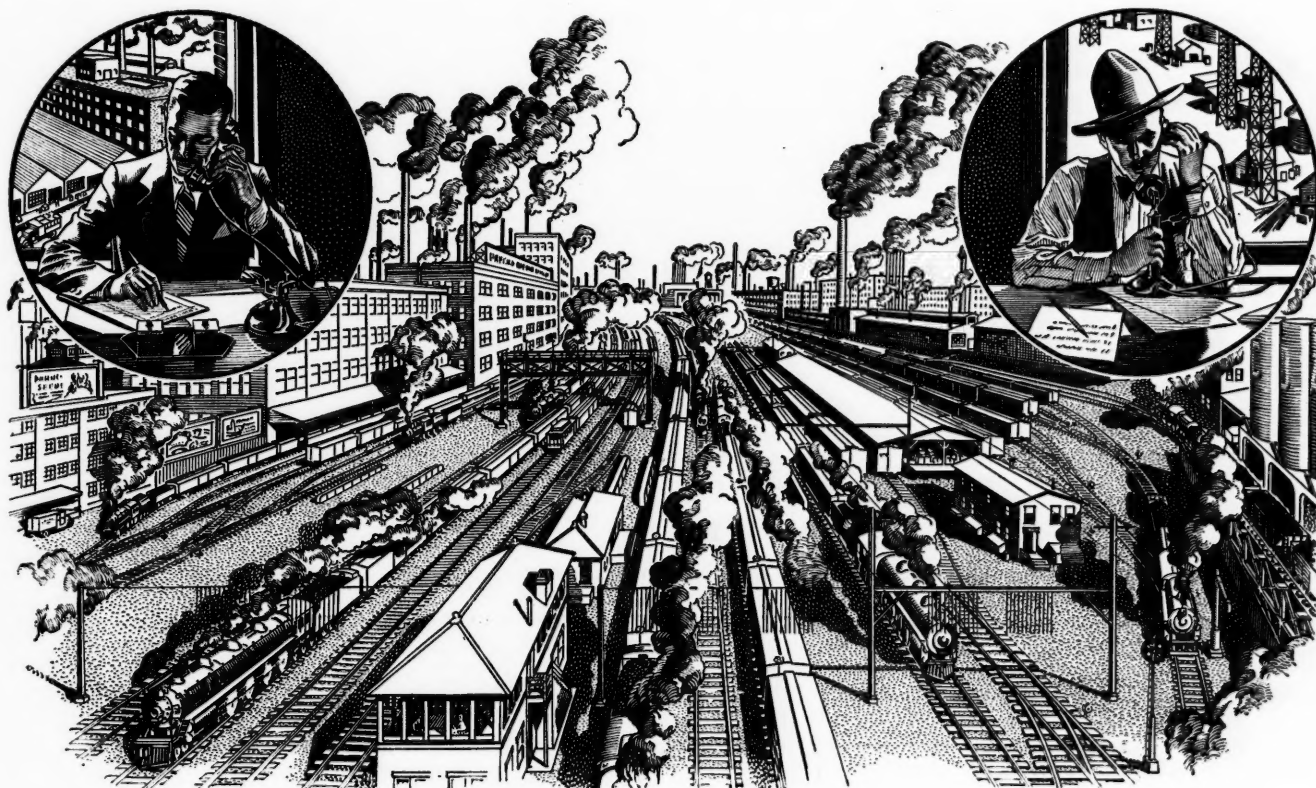


INTERNATIONAL TRUCKS

THE TELEPHONE PLAN

of Market Coverage

aids in the distribution of Westcott valves



THE Westcott Valve Company uses features of the Telephone Plan of Market Coverage to meet a specific distribution problem. The company's business is concerned largely with the oil and natural gas industry of the west and south. Speedy shipments are essential, as the operations are usually ready for the valves when orders are placed.

The telephone plan developed for the company enables it to give truly exceptional service. Telephone contact with both customers and field representatives is frequent. In many cases, delivery is started a few minutes after the customer gives his order by telephone.

The telephone plan also brings this company much new business. In one territory, 103 per cent

increase in the use of the telephone was accompanied by a business increase of 130 per cent. Another division increased its gross business from \$8700 to \$47,000 in five months, largely through use of the telephone.

Telephone costs are low. Typical station-to-station day rates: Buffalo to Syracuse, 75c; Chicago to Minneapolis, \$1.60; Los Angeles to San Francisco, \$2.35; Jacksonville to Cincinnati, \$2.55.

The Telephone Plan of Market Coverage helps business men accomplish more in less time and at less expense. Its features can be adapted to the specific needs of any business concern. An experienced telephone representative will gladly show you how they can be applied to your business.

JUST CALL YOUR BELL



TELEPHONE BUSINESS OFFICE

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ARCHITECTS

ENGINEERS

CHEMISTS

GEOLOGISTS

CHEMICAL ENGINEERS

ACCOUNTANTS

CONTRACTORS

Detailed classification of specialized work undertaken by those having cards in this Directory will be found in Classified Index.

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Wm. J. J. Chase, A. I. A.

Architect

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140 Peachtree St. ATLANTA, GA.**G. Lloyd Preacher & Co., Inc.**

Architects and Engineers

501 Mortgage Guarantee Bldg.
ATLANTA, GA.**J. B. Converse & Co., Inc.**

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plans, estimates, supervision.
MOBILE, ALA.**Elroy G. Smith**Consulting and Designing
Civil-Hydraulic Engineer
Industrial Hydro-Electric Development
a Specialty
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AUGUSTA, GA.**Hornbuckle Contracting Co.**

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Industrial Village Utilities
ATLANTA, GA.**Wiedeman and Singleton, Inc.**(Successors to Paul H. Norcross)
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DISPOSAL, APPRAISALS, VALUA-
TIONS, REPORTS
Candler Building ATLANTA, GA.**S. E. Huey**

Consulting Engineer

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Ouchita Bank Bldg., MONROE, LA.
City Bank Bldg., SHREVEPORT, LA.**J. E. Greiner & Company**

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Design, Construction, Investigation, Ad-
visory Service—Bridges, Docks, Piers,
Warehouses and other Engineering
Structures.
1201 St. Paul St., BALTIMORE, MD.**Whitman, Requardt & Smith**

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Baltimore Trust Bldg., BALTIMORE, MD.
ATLANTA, GA. ALBANY, N. Y.**Chas. T. Main, Inc.**

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ments.
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and Structural Steel Bridges, Buildings,
and Manufacturing Plants.
300 Builders Exchange Bldg.
MINNEAPOLIS, MINN.**Consoer, Older & Quinlan, Inc.**

Mems. A. S. C. E.

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Engineering
317 N. 11th St. ST. LOUIS, MO.
205 W. Wacker Drive, CHICAGO, ILL.**Kansas City Bridge Co.**Established 1893
Builders of Railroad and
Highway Bridges
River Improvement Work
General Office, 215 Pershing Road (Union
Station Plaza), KANSAS CITY, MO.**W. S. Lee Engineering Corporation**

Consulting Engineers

Hydro-Electric Developments. Central
Steam Stations. Industrial Building.
Institutional Buildings.
535 Fifth Avenue Power Building
NEW YORK CHARLOTTE, N. C.**MacElwee & Crandall, Inc.**Industrial and Civil Engineers
Investigations, Reports, Design, Super-
vision—Port Development, Piers, Ter-
minals, Airports, City Planning, Water
Front, Reclamation, Industrial Surveys
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ROCHESTER, N. Y. NEW YORK CITY**Morris Knowles, Inc.**

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Water Supply and Purification, Sewer-
age and Sewage Disposal, Valuations,
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Civil and Sanitary Engineers
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Structural Improvements
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NASHVILLE, TENN.**Engineering Service Corp.**

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COLD and DRY STORAGE WAREHOUSES
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HOUSTON, TEXAS, U. S. A.**Fiske-Carter Construction Co.**

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DURHAM, N. C.**Robert Cramer**Consulting Engineer
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Systems—Utilization and Disposal of
Industrial Wastes. Power Plants.
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tory Service, Valuations and Reports.
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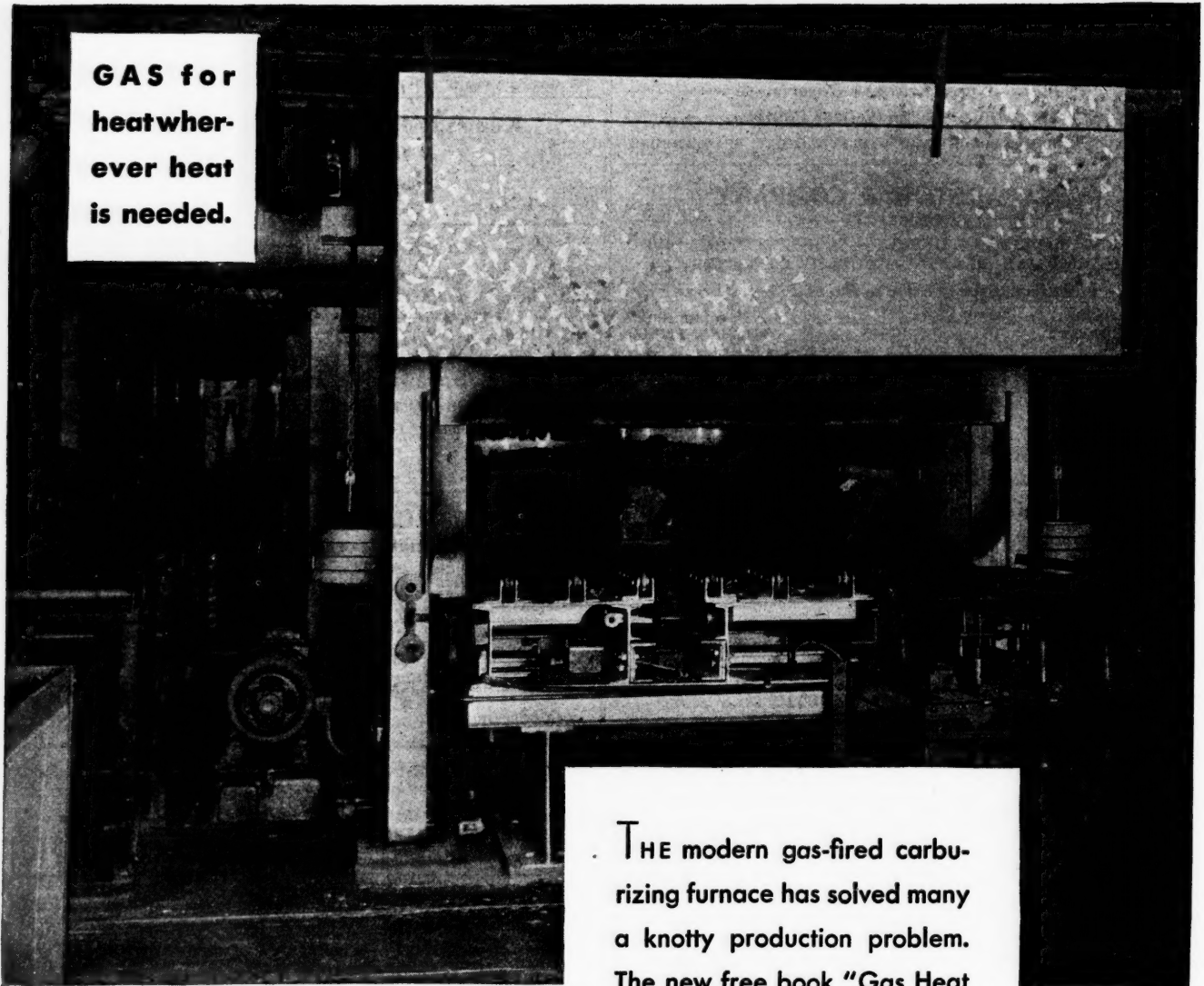
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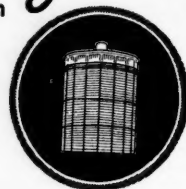


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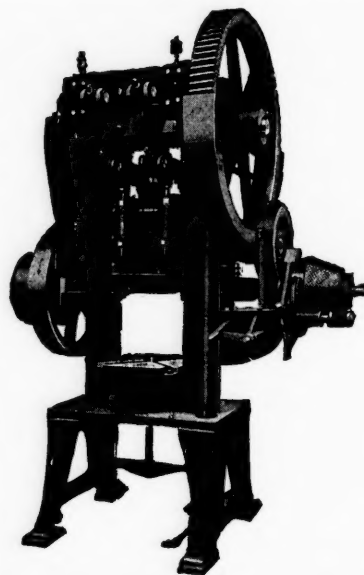
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Devoted to the Upbuilding of the Nation Through the Development
of the South and Southwest as the Nation's Greatest Material Asset

Vol. C No. 16 }
Weekly }

BALTIMORE, OCTOBER 15, 1931

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Consider the Railroads

IN the efforts of the government to help industry and the banking structure of the country, it should not be overlooked for a moment that the condition of the railroads should immediately be taken up as a national economic factor. To say that railroad expenditures almost represent the difference between industrial activity and industrial inertia is hardly an exaggeration of the facts.

The aggregate of railroad expenditures for (1) capital expenditures; (2) purchase of material and supplies; (3) wages; (4) tax payments, and (5) distribution of interest and dividends runs to \$5,900,000,000 a year in normal times.

"To no individual factor is the development of the country more largely due than to Transportation," said the MANUFACTURERS RECORD, September 3, discussing "Transportation in Industrial Revival." To no individual factor will American economic recovery be more largely due, in its way, than to resuscitation of the railroads. The variety and diversity of channels through which the railroad dollars percolate into national business is of equal importance with the five-billion dollar volume. The pay envelopes in agriculture and manufacture, in construction and mining, in the office and in the shop contain a large proportion of railroad dollars.

In a statement that the railroads in normal times absorb over 25 per cent of the country's steel output, an equal percentage of the lumber production, an even greater proportion of the coal supply and large volumes of cooper, oil, cement and other American products, President Daniel Willard of the Baltimore & Ohio offered only an indication of the railroads' economic influence. We present in round numbers, in the accompanying table, the average annual purchases by Class I roads, alone, computed from statistics compiled by the Bureau of Railway Economics.

Average Annual Purchases by Class I Roads

Item	Amount
Fuel:	
Bituminous coal	\$280,000,000
Anthracite coal	8,200,000
Fuel oil	62,000,000
All other	5,800,000
Total	\$356,000,000
Forest Products:	
Crossties	\$83,000,000
Other ties	10,000,000
Timber and lumber.....	55,000,000
Other forest products.....	8,000,000
Total	\$156,000,000
Iron and Steel Products:	
Steel rail, except scrap.....	\$92,000,000
Wheels, axles and tires.....	40,000,000
Frogs, switches, bolts, spikes, etc.....	67,000,000
Bridges, turntables, structural steel, etc.....	45,000,000
Flues and tubes for boilers.....	7,000,000
Telegraph, telephone, signal material....	25,000,000
Rivets, springs, etc.....	19,000,000
Locomotive and car casting etc.....	60,000,000
Machinery, repair parts, other steel and iron	45,000,000
Total	\$400,000,000
Miscellaneous:	
Cement	\$7,000,000
Lubricants, waste, etc.....	24,000,000
Metals and metal products.....	52,000,000
Ballast	23,500,000
Air brake material.....	23,000,000
All electrical materials.....	18,000,000
Stationery and printing.....	25,000,000
Dining car and restaurant supplies.....	27,000,000
Rubber and leather goods.....	9,500,000
Painters' supplies and chemicals.....	35,000,000
Automotive equipment and supplies....	2,000,000
Train and station supplies and miscellaneous	100,000,000
Total	\$346,000,000
Grand Total	\$1,258,000,000

Virtually \$2,600,000,000 was paid in wages by the railroads in 1930 to 1,250,000 employees. Through department stores and grocery shops and other domestic purveyors, a great percentage of this money filters through the sieve of trade to the basic producers of raw and fabricated products and the army of workers

these employ. An appreciable proportion finds its way into highway construction through automobile and gasoline taxes, promoting employment both directly and indirectly. Much goes to banks and insurance companies, by which it is utilized for the financing of constructive enterprises. No small part is spent in beneficial recreation, in itself a tremendous national asset.

The composite tax bill of the Class I roads is nearly \$400,000,000 a year, divided among federal, state, municipal and local governments. These funds are expended largely for educational purposes, including teachers' salaries; for the construction and maintenance of streets and highways; for salaries of police, firemen and other governmental employees, and for the purchase of materials of many kinds used in government activities. "Like other railway expenditures, the tax payments of the railways enter the channels of general trade," the Bureau of Railway Economics adds.

Structural and roadway construction ran to \$500,000,000 in the capital expenditures of the railways in 1929, and invariably shows a mighty aggregate.

In terms of transportation service, the railways carry about 2,500,000,000 tons of freight each year and more than 780,000,000 passengers, at a cost of 1.09 cents per ton a mile for freight and 2.81 cents per mile for each passenger.

The profound depth of the people's financial interest in the railways is equally impressive. Directly as holders of securities or indirectly through banks and insurance companies and other fiduciaries, the people own \$18,679,000,000 in net capitalization, minus only a comparatively small percentage owned abroad, while the railways themselves hold about \$5,303,000,000 of their own securities, or a total outstanding capital of \$23,982,000,000 as of 1929.

Constructive reinvigoration of any industry of this magnitude is a national necessity and obligation. Among the points suggested by practical railway men are: Opportunity to compile reserves in prosperous times, against days of depression; more freedom in the rate field, for decreases, as well as for increases; more freedom in the field of waterways transportation; more freedom in the withdrawal of profitless service; more freedom in the technical details of equipment and operation.

Steps for the reinvigoration of agriculture and manufactures, of banking and trade and employment, have been undertaken or formulated. Sound reestablishment of the railways, as an economic factor of prodigious weight, must be made the immediate feature in the program for American and world business revival.

Every large advertiser has on his prospect list, either potentially or actually many prospects who are almost sold. The last dollar spent in advertising will bring more returns than the first because it gathers in the results of this cumulative effect.—*Printers' Ink.*

Wise Spending

UNDER the heading "Wise Spending Always Timely," the Gadsden Times concurs in the proposal that the government put out a bond issue sufficient in size to inaugurate a nationwide campaign of improvement with a view to giving work to the idle, and quotes a statement by Claude G. Bowers as follows:

"The bonds would be oversubscribed, the money would be speedily set to work in putting men to work, and some of the money that gluts the banks could do the work of humanity. Enthusiastically we hailed the opportunity to subscribe the money to be used for purposes of destruction, and it would be a rotten civilization that would think less of the opportunity to do the works of construction."

In commenting on this the Times says:

"Mr. Bowers does not specify what he means by 'works of construction' but it is to be inferred that he means the putting of public monies in enterprises that would add to the material growth of the nation and thereby enrich it and convert the expenditures into wise and profitable investments. That, at least, should be the standard. Money spent for public improvements that bear directly on the growth and prosperity of the nation is a step that is sound in logic and serves a two-fold end, it gives employment and insures a richer and happier America."

Also, a nationwide development program in these times of lower costs would be in the interest of national economy, for one-half to one-third more work can be done today with the amount of expenditure that was necessary under boom-time prices.

No real nationwide improvement program has been undertaken, although much publicity was given to the effort to create employment through the speeding up of public work. According to an Associated Press report "the White House estimates that Federal expenditures for relief since the beginning of the depression will pass \$1,500,000,000 by the end of next June."

An analysis of this report, which was based upon tabulations by the public construction division of the Department of Commerce, shows the comparatively meagre amount that has been devoted to a constructive improvement program. In 1930, \$452,000,000 of the \$1,550,000,000 was expended for drought and unemployment relief. It is estimated that \$787,000,000 will be the total expenditure for similar purposes in 1931. As to the amount for actual construction work to give employment to labor and industry, prospective expenditures for the first half of 1932 are sub-divided as follows: Public buildings and lands, \$126,980,000; other construction, \$95,737,000; works under direction of Engineer Corps, \$40,000,000; repairs and maintenance, \$37,283,000, and roads, \$73,593,000. Based on these figures there is in sight until June, 1932, Federal government work aggregating less than \$370,000,000, if the cost of the lands be deducted.

We repeat that construction work by the Federal government in an effort to stimulate employment has not been on a scale sufficiently great to produce results needed.

Those best qualified to judge are most emphatic in emphasizing that now is the time to build because of

the abundance of labor and low cost of materials. If this advice is sound for the individual and the corporation it is equally sound for the Government.

It will prove a wise investment if needed upbuilding work can be carried on at low costs and at a time when it will be of the greatest benefit to all.

Restoring Confidence in Banks

THE wave of fear which swept certain sections of the country, causing large withdrawals of deposits from banks, has been stopped. Had not the banks protected themselves by making their assets more liquid than ever before in their history, continued heavy withdrawals would have meant disaster.

Speaking before the State Bankers' Division of the American Bankers' Association at Atlantic City, Fred W. Ellsworth, vice-president of the Hibernia Bank and Trust Company, New Orleans, said that "while bad management deserves criticism, there are in the United States 22,000 solvent banks with funds of more than \$70,000,000,000 under competent and intelligent management."

"The banking structure of America," he added, "remained thoroughly sound and entirely adequate for business and financial requirements."

Any bank, however solvent, is endangered by the sudden concerted withdrawal of cash, which makes it necessary to throw the bank's assets on a depressed market. Not only is the bank endangered but such action endangers the solvency of an entire community, for like a house of cards the collapse of the banking structure undermines other business dependent upon bank credit.

As a result of the action taken on the President's initiative, banks are to be given relief through the privately owned and operated \$500,000,000 National Credit Corporation. This is designed to lend money to banks to free frozen assets, otherwise perfectly sound. According to the preliminary plan it is to be an emergency measure for relief until the Federal Reserve Act can be amended to permit broader classification of paper eligible for rediscount.

There is no thought or suggestion that unworthy assets or questionable securities will be accepted for loans. The movement is wholly constructive and recognizes that there are real values in possessions which, due to peculiar conditions, have not found a ready market, except at great loss to the seller.

As the MANUFACTURERS RECORD said some time ago, "confidence in our banks and the banking system is a requisite to healthy, progressive business. Bankers have been complaining of the unnecessary restrictions imposed by the Federal Reserve in the matter of eligible paper. It would be wise if present rules in this direction could be reviewed and these restrictions lifted."

Recent events indicate that relief has come sooner than had been hoped. The mere announcement of the proposal to aid banks was sufficient to strengthen

immediately the confidence of the people and of business, in the underlying soundness of the nation's banking structure.

The Five-Day Week

THE five-day week is gaining in favor. Labor organizations have been advocating it for years, but its adoption under present conditions is mainly for the purpose of reducing costs and, also, in certain industries for the reason that by a stagger system of employment they are able to offer work in this way on a part-time basis to an additional number of men.

Arguments advanced for the five-day week vary according to different standpoints. Some contend that as industry can produce more than can be consumed, a general five-day week will help more nearly to equalize production and consumption. Union labor has held to this view without sanctioning a cut in the weekly pay envelope. It is not only being extended in industrial plants, but to many office workers on a regular weekly stipend. Its permanence depends on conditions in the future, and the whole question remains an individual problem for each concern to settle for itself. It is evidently not a question for legislative decree, because it is inconceivable that slackness of demand, so apparent at present, will continue indefinitely, and with better conditions very probably full-time operation will be necessary as before to meet the needs of the people.

During the past decade, with the growth in standardization and mass production and the development of labor-saving machinery, it has often been predicted that we would reach a point where men's working hours could be shortened and the demand for goods still be filled. Some even have visualized a three-day working week. Whether this is good for the individual or good for enterprise is beside the point at the moment. The question today is to equalize production to demand, as our efforts so far to boost demand up to production capacity have not been very successful. Nearly every industrial group has a capacity for supplying production in excess of normal demand. This has been so to a large extent during boom periods. It is greatly intensified under present conditions.

Undoubtedly one of the lessons to be learned from the depression will be a realization that we cannot blindly produce goods on an ever accelerating scale. There is a saturation point and there must be developed a greater cooperation and coordination between the different units of an industry in carrying out carefully considered plans for logical control over production. Apparently industry, in trying to carry out such ideas while existing laws remain as they are, is at a dead end. There is an ever-increasing and insistent demand for relief to be given business through the easing of some of the more drastic provisions of anti-trust laws that do not fit the times. These laws are incongruous with the needs of the hour.

Classification of Employment

THE total number of persons engaged in gainful occupations in the United States as of the census of 1930 was 48,832,000. Manufacturing and mechanical industries with 14,317,000 workers comprise the largest group; in second place comes agriculture, forest and fishing, with 10,752,000 engaged; trade is third, with 7,537,000 employed. There were 4,438,000 persons occupied in the transportation field, and 1,158,000 in mining.

Based on the individual state figures, in the South there were 15,670,000 gainfully employed, of which 6,048,000 were in agriculture, forestry and fishing; 3,050,000 were employed in manufacturing and mechanical pursuits, 424,000 in mining, 1,832,000 in trade and 1,204,000 in transportation work. More than 32 per

Conference Board says that on the face of the returns it appears the extractive industries, represented by agriculture, forestry, fishing and mining, engaged more than 24 per cent of all gainful workers; manufacturing and mechanical industries engaged 29 per cent, and distribution of goods through transportation and trade 24½ per cent.

Agriculture accounted for 22 per cent of all the gainful workers in the country. The proportion falls below this amount in the Northern states east of the Mississippi River, with the exception of Vermont and Wisconsin. In some of the Eastern states, agricultural workers ran as low as 5 per cent of all employed. In the South and in the states west of the Mississippi river, as was to be ex-

The accompanying table classifies the gainful workers as of 1930 for the various Southern states and for the geographical divisions of the United States into the more important industrial groups.

Intracoastal Canal Service

New Orleans, La.—The Louisiana-Texas Waterways Corporation, organized as a \$2,000,000 enterprise, plans to inaugurate a freight service on the Intracoastal Canal between New Orleans and Houston and ultimately to operate throughout the entire route of the canal from New Orleans to the Rio Grande River. The new company has established offices at 1104 Maritime Building, New Orleans, and has ordered two towboats and ten barges representing an expenditure of \$200,000. Towboats, to be powered by Diesel engines, will be built for a draft of four feet to permit them to operate through sections of the canal which have not yet been deepened to 9 feet. Regular freight service will be offered in about four months.

A Correction

In the article published last week on "America's Resources and Problems," by L. F. Loree, chairman of the executive committee of the Kansas City Southern Railway Co., New York, the proportion of the world's population in the United States, through a typographical error, was given as 16 per cent. Of course it is commonly known that we have but *six per cent* of the world's population, but in order to keep the record straight, we repeat the sentence as it should have read:

"In the United States, with no more than six per cent of the population of the world and 5.7 per cent of its land area, we produce 72 per cent of the oil, 37 per cent of the coal, 42 per cent of the iron ore, 45 per cent of the finished steel, 51 per cent of the copper, 54 per cent of the cotton, 64 per cent of the corn, 20 per cent of the wheat and hold 45 per cent of the gold."

The MANUFACTURERS RECORD has frequently presented this comparison of the economic position of the United States with respect to the rest of the world.

INDUSTRIAL CLASSIFICATION OF GAINFUL WORKERS (1930) IN THE SOUTH

States	Total*	Agriculture, Forestry and Fishing	Mining	Manufacturing and Mechanical Industries	Transportation	Trade
Alabama	1,026,320	498,882	34,959	185,419	57,745	86,134
Arkansas	667,870	392,042	9,074	74,486	40,465	57,906
District of Columbia	243,859	1,164	171	42,440	21,428	41,915
Florida	599,010	146,911	2,741	128,739	54,148	92,460
Georgia	1,162,174	503,422	4,214	236,775	69,736	113,157
Kentucky	907,166	360,853	66,951	153,282	77,024	98,405
Louisiana	815,725	311,156	9,194	146,836	77,507	98,709
Maryland	672,906	90,395	5,677	222,922	72,511	108,292
Mississippi	844,887	565,862	801	75,517	38,205	53,458
Missouri	1,458,054	375,228	19,604	370,787	145,379	245,020
North Carolina	1,141,129	509,355	3,672	286,245	53,968	99,193
Oklahoma	828,029	308,425	60,210	111,953	62,212	115,735
South Carolina	687,721	348,285	1,170	145,174	30,189	49,142
Tennessee	958,209	381,217	16,039	197,038	74,207	110,025
Texas	2,207,118	848,838	52,023	343,779	191,615	305,880
Virginia	880,276	282,503	17,332	204,207	84,985	98,720
West Virginia	570,459	123,711	120,783	121,332	52,540	58,103
South	15,670,912	6,048,249	424,615	3,049,931	1,203,864	1,832,284
New England	3,431,360	236,302	10,161	1,568,401	274,085	561,703
Middle Atlantic	11,055,742	615,799	345,946	4,223,569	1,131,955	2,052,421
East North Central	10,109,034	1,480,500	168,177	3,796,394	958,289	1,643,406
West North Central	3,594,972	1,335,242	47,746	576,181	355,821	539,978
Mountain	1,395,107	443,969	96,290	210,652	150,537	188,492
Pacific	3,575,462	592,387	65,129	892,407	364,054	718,742
United States	48,832,589	10,752,448	1,158,064	14,317,535	4,438,605	7,537,026

*Includes professional, domestic, public service and industries not specified.

cent of the gainfully employed in the United States were in the 16 Southern states. The South's proportion of employment to the country's total in the various industries was: Agriculture, fishing and forestry, over 56 per cent; mining, nearly 37 per cent; manufacturing and mechanical industries, 21 per cent; transportation 27 per cent, and trade 24 per cent.

In classifying the employment as reported by the Census Bureau for the United States, the National Industrial

pected, the proportion of gainful workers employed in agriculture was above the national average. Certain of these states—Mississippi, Arkansas, North and South Dakota and South Carolina—employ more than half of their gainful workers in agricultural pursuits. While mining occupies a relatively minor position, West Virginia shows that over one-fifth of the gainful workers in that state are engaged in mining; and in the coal states of Pennsylvania and Kentucky the proportion is far above the average.

Railroads Large Purchasers of Products of Basic Industries

THE purchasing power of our steam railways is of vital concern to all lines of industry. Any condition, such as the rising tide of competition from other agencies of transportation, which reduces railway income naturally threatens their ability to buy. This is certain to contribute further to the unstabilized condition of business.

While keeping in mind the generally disturbed situation, it is interesting to recall that the railroads are one of the largest customers of the basic industries. They buy annually 23 per cent of the bituminous coal output and about 4 per cent of the anthracite production. Directly they consume approximately 17 per cent of the annual iron and steel output and indirectly about 32 per cent, through orders for all kinds of equipment to equipment manufacturing concerns. The railways purchase directly about 16 per cent of the total timber cut; this figure is increased to above 20 per cent if indirect purchases are included.

The railways consume annually about 15 per cent of the copper and brass produced. They also buy large amounts of tin, lead and zinc, and considerable cotton in the form of cotton waste. With respect to cement, statistics indicate they use more than eight per cent of the total output. The proportion of the fuel oil output taken by the railways approximates 19 per cent.

A compilation of statistics from special reports received from the Class I lines shows that a total of \$1,038,500,000 was spent by these roads last year in the direct purchase of fuel, materials and supplies. Comparative figures of direct railway purchases for the past eight years are shown below. They do not include the value of materials and supplies purchased indirectly by contractors who carry on construction work or build equipment or do other work for the rail-

By

LEE G. LAUCK

Economist, Washington, D. C.

ways on a contract or lump-sum agreement basis.

RAILROAD EXPENDITURES FOR MATERIAL AND SUPPLIES

1923	\$1,738,703,000
1924	1,343,055,000
1925	1,392,043,000
1926	1,559,032,000
1927	1,395,928,000
1928	1,271,341,000
1929	1,329,535,000
1930	1,038,500,000
Four months ended April 30, 1931	298,000,000

Expenditures and percentages enumerated are for current operations and do not include capital expenditures of the railroads. The purchases for capital account, however, during the past eight years have totaled \$6,741,716,000, or about \$842,714,500 annually, while purchases for current operations totaled \$11,068,137,000, representing an annual average expenditure of over \$1,383,500,000. At their present rate of buying, the railroads will fail to reach their average this year by approximately \$500,000,000.

The amounts purchased for capital account are largely determined by conditions of railroad finances generally. It is not easy therefore to overestimate the importance to the country of maintaining railroad credit at a point which will permit a continuation of capital expenditures, essential not only that the railroads may provide at all times a machine adequate to transportation demands but also that their business may be conducted at the lowest possible operating cost. In other words, it is to the interest of the public to keep the roads

in a position where their credit is sound and where the required capital is available, in order that they may function efficiently.

The railways are adapting themselves to newly developing conditions of competition and cooperation. But the people must recognize that the country's welfare depends on a modern and coordinated system of transportation, and that foresight is necessary, and an earnest and intelligent survey of present and future policy with respect to transportation development to preserve the most effective agencies in full vigor and enable them to meet the demands for transportation service.

\$4,000,000 Power Expenditures

Chattanooga, Tenn.—For the first eight months of 1931 the Tennessee Electric Power Company expended \$3,400,000 for maintenance and improvements, according to Jo C. Guild, vice-president and general manager, and it is estimated that for the full 12 months of the year the expenditures will reach a total of \$4,000,000. This is in line with the company's policy to improve and maintain its properties in first class operating condition to render good service to its customers and to meet requirements of new business.

Buys Louisiana Cotton Mill

Shreveport, La.—The Greensboro Supply Company, of Greensboro, N. C., has purchased from the Commercial National Bank of Shreveport, J. G. O'Brien, vice-president and trust officer, the complete cotton mill machinery layout formerly operated by the L. H. Gilmer Company of Louisiana. The buildings are new and modern, of factory construction.

Mexican Air Service Offers Trade Advantages to the South

AIR travel, and transport of mail and express in Northern Mexico has produced a peaceful revolution of far-reaching effect on the people and the commerce, both nationally and internationally, of that portion of the great republic to the south of us. The chief factor in this development is the Corporacion Aeronautica de Transportes, S.A., which operates a line from El Paso to Mexico City, and a cross-country line from Matanzas to Matamoros (Brownsville). The air distance of the line from El Paso to Mexico City is 1766 miles, and from Matanzas on the Pacific to Matamoros on the Gulf of Mexico is 1021 miles. In addition, the company runs a service from Matanzas to Tayoltita, chiefly for the transportation of precious metals.

Connects With Southern Lines

At El Paso the service connects with the American Airways, Southern Division, eastbound to Atlanta, via Big Springs, Fort Worth, Dallas, Shreveport and Jackson, and westbound to Los Angeles. It also makes contact with the Mid-Continent Air Express, northbound to Denver. These airlines in turn be-

By

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come part of a national network, reaching practically every important point of the United States. At Brownsville, Texas, the Corporacion Aeronautica de Transportes also makes contact with American Airways, Southern Division, northbound to Dallas, via San Antonio, Austin and Waco, and with Pan American Airways southbound to Tampico, Vera Cruz, Merida and Guatemala.

Equipment and Personnel

The company employs Lockheed Vega planes almost exclusively; in actual operation these average about 150 miles an hour. It also operates a few machines of the Ryan and Bellanca Air Bus type.

The company has a daily service and its personnel is of as high a type as is met with anywhere in the United States. Most of the pilots are Americans. During 1930 over 3000 separate flights were made in and out of Torreon—headquarters of the company and located in the state of Coahuila—where it maintains commodious offices in charge of well-trained personnel. The president of the company, Theodore T. Hull, and vice-president, J. M. Grajales, are both comparatively young men, of wide experi-



C. A. T. Headquarters at Torreon



A Smelter in Monterey

ence and admirable energy and enterprise.

Service and Rates

It was recently my privilege to travel over the entire system except the mine service to Tayoltita. Leaving El Paso at 6 A. M., the plane reaches Mexico City, 1766 miles away, the same day, at 4.45 P. M. Stops are made at Chihuahua, Parral, Torreon, Zacatecas, Aguascalientes, Leon, and Queretaro. The actual flight time on this journey is eight hours; including stops it is 10 hours and 45 minutes. The corresponding

scheduled rail time is 47 hours. Cost of the trip by air is \$151.50; the cost by rail, including Pullman and dining charges, is \$149.25. There is therefore an extraordinary saving in time, which is highly appreciated by the business interests of Northern Mexico and the Southern section of the United States.

The journey from Torreon to Matzatlán includes a stopover at Durango. The time required for this trip is only two hours against 57 hours by train, provided connections are made, the train service being limited to Tuesdays and Thursdays. Cost of this trip by air is \$40.80, compared to \$141.65 by rail. There is therefore a substantial saving in time and cost.

From Torreon to Matamoros (Brownsville), stopovers are made at Saltillo and Monterey. This part of the journey requires four hours by air against 23 hours by rail. Cost of the trip by air is \$61.30 against \$55.30 by rail. Here again is a very substantial saving in time, appreciated by the business interests of the sections covered. All transportation

freight. There has been a decided increase in all these items practically from month to month, best shown by the comparative amount of express and freight which in January was 26,209 pounds, and in June 106,789 pounds. It is a record deserving of extended consideration by business interests throughout the Southern States, for Mexico next to Canada will always offer the best opportunities for international trade development, provided all factors involved are given due consideration. I have been in Mexico five times during the past few years and everywhere I have noted marvelous improvement in the country's economic condition. It is true that just at present the low price of silver complicates business conditions more or less, but this I am sure is only a passing phase.

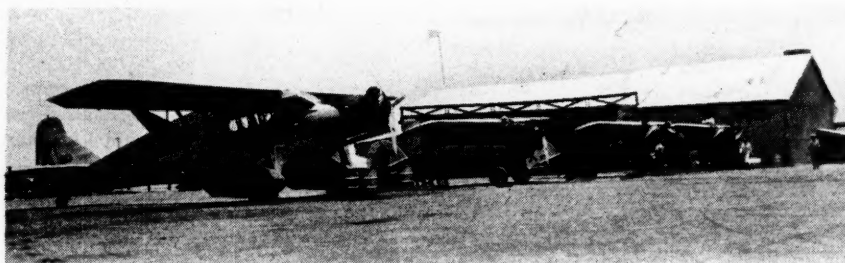
A descriptive account of my air journey, which includes practically every mile over established lines either by the C. A. T. system or the Pan American system, would far exceed the limitations of this article. The journey over the

is surpassingly beautiful, particularly on the journey from Torreon to Matzatlán. The plane rises sometimes to considerable heights and on my own recent journey we twice reached a maximum altitude of 14,000 feet, but such heights cause no distressing symptoms since the passenger undergoes no physical exertion. The lines are patronized by both Americans and Mexicans, including the better type of Indians.

Trade Possibilities

It has been my privilege to travel over most of the established air lines of the United States and Canada, and I can bear witness that no service exceeds in speed and punctuality or in safety considerations the C. A. T. system in the North, and the Pan American system in the South. The time cannot be far distant when air transportation will double and treble the extent of these operations, for the general public is rapidly becoming air-minded and getting rid of senseless apprehensions. Considering the enormous advantages in the conquest of time and space which the airplane affords, it is difficult to understand the reluctance of important business interests to utilize the service more extensively in sales promoting efforts.

My recent experience in Mexico fully confirms my earlier conclusions, that the future development of American business will to an increasing extent depend on utilizing air transport for passenger, mail and express purposes. In any event air service has eliminated the greatest handicap to intercourse between the United States and Mexico, by the saving of time which in the past has been the most serious hindrance, for regardless of notable improvement in Mexican railways the trains are still very slow and



Planes Ready to Depart from Torreon Airport

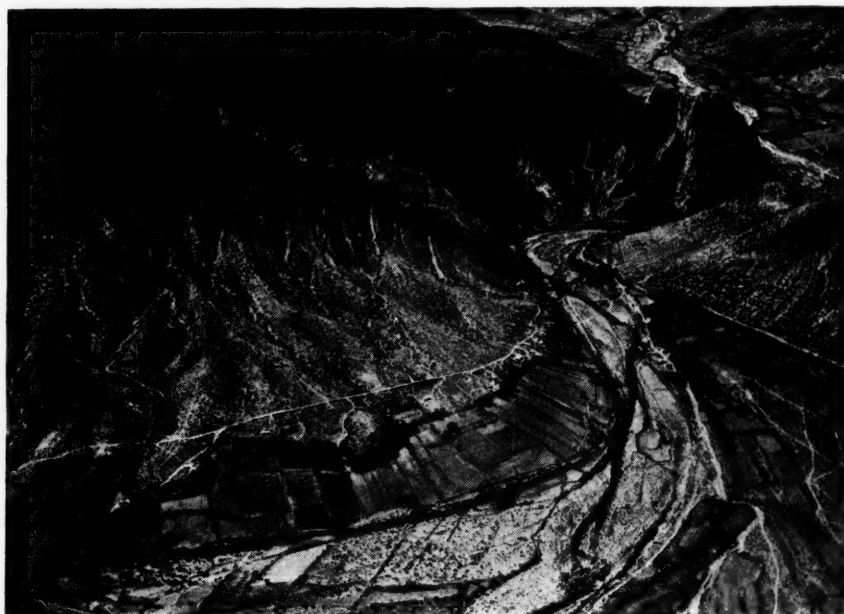
charges are in Mexican currency which may be converted into American currency at 50 cents to the Mexican dollar, or at a lower rate on account of the low price of silver and depressed state of Mexican currency.

Aside from its passenger service the company operates an important express and freight service, covering practically all the ordinary articles of everyday commerce if not too heavy. The C. A. T. service is said to carry annually more freight than any other American airline, with the possible exception of the Ford service from Detroit to Chicago. An unusual service is rendered to the San Luis Mining Company at Tayoltita, Durango, in that as much as 2000 pounds of silver and gold bullion are daily carried from this mining company in the Sierra Madre mountains to Matzatlán, Sinaloa, a distance of 100 miles.

Business Increases

During the first six months of 1931 the company flew 4820 air hours or approximately 579,215 air miles, carried 3421 passengers, 18,950 pounds of mail, and 351,718 pounds of express and

desolate plains of Northern Mexico or the highly cultivated, more fertile valleys of the interior never fails to be of absorbing interest. At times the scenery



A Mountain-and-Valley View Between Torreon and Durango

often uncertain. It would be advisable for air transport companies to secure more publicity and to advertise more widely their obvious advantages. With this should go better publicity as to the attractions of the country as seen from the air. Mexico is a land of extraordinary scenic beauty and the Mexican people are everywhere most friendly disposed towards Americans.

Knowledge of Spanish Language Important

Other nations are decidedly more active in sales-promotion efforts in Mexico, and Americans only too often, by their ignorance of the Spanish language find themselves at a serious disadvantage in competition with England, Germany and other countries. The Germans, for example, have a splendid club in Torreon, while they publish a daily newspaper in the German language in the city of Mexico. It is always pleasant to meet with those Americans who have been many

years in the country and who speak the Spanish language fluently and have become fully adapted to local conditions. Everywhere highly thought of, they form the nucleus of a much larger American contingent sure to settle in Mexico for business reasons in years to come. What is most needed is a better knowledge of Spanish in American schools and in higher institutions of learning, and the preparation of sales publications in Spanish for local distribution. There is business to be had in the Mexican Republic but it will require more energetic sales efforts than those at present observed.

Water Works Meeting

The third annual meeting of the Virginia Water and Sewage Works Association will be held November 16-17 at the Virginian Hotel, in Lynchburg. Information may be obtained from H. W. Snidow, State Office Building, Richmond.

New Orleans Sets Pace

In reply to a request for a résumé of the present business situation in New Orleans, Wilson S. Callender, publicity secretary of the New Orleans Association of Commerce, writes:

"Business has increased since August and prospects are good. Two local industries of importance doubled their capacity during September. The United States Bureau of Labor Statistics reports an improvement in employment conditions, and during September the Association of Commerce announced the establishment of four new industries.

"New Orleans has consistently during the past three months led the nation in increase in construction activity. More than \$100,000,000 of public work is in sight.

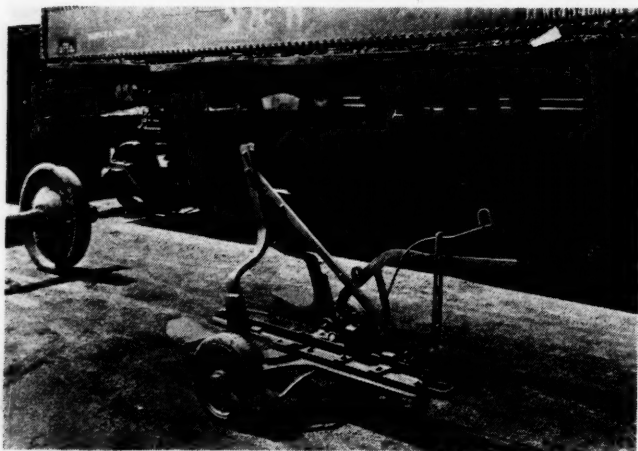
"Because of the fact that New Orleans by no means 'has all of her eggs in one basket,' but is a port, a city of industry and a tourist city, we have been less affected by the depression than most other cities. Custom receipts for August were 30 per cent ahead of the previous year."

A Loading Wagon for Car Wheels

One of the heaviest operations in the maintenance of freight car equipment is the application and removal of wheels. In the past it has been common practice to roll wheels by hand from wheel storage tracks to point of application. In order to facilitate such work, an automatic car wheel wagon and a tractor have been placed in use at the West

Roanoke (Va.) shops of the Norfolk & Western Railway Company. Loading is effected by backing the lifting arm of the bell-crank under the pair of wheels, the average weight of which is around 2400 pounds. As soon as the wagon is in position, the tractor operator applies brakes to the wheel wagon and releases the sliding bar simply by lifting the lock lever. The tractor is moved forward,

pulling the sliding bar and bell-crank connecting rod so that the wheels are raised from the ground. When thus lifted, the sliding bar comes to a locked position and the brakes on the wagon are released automatically. To unload, the operator releases the sliding bar lock, which permits the wheels to drop to the ground and the wagon automatically comes to a closed position.



New Car-Wheel Loader Proves a Labor-Saver



Tractor and Wheel Wagon in Action

Signs of Better Business

THE WESTINGHOUSE ELECTRIC AND MANUFACTURING COMPANY has received a large order for porcelain insulators from the Pennsylvania Railroad. They are for use to suspend high tension lines for the new electrification work between Washington, D. C., and Wilmington, Del. If shipped at one time the insulators would fill a freight train of 82 cars of 30,000 pounds capacity each. The immense order not only means additional employment in fabricating the insulators but also employment for suppliers of raw material, including clay, feldspar and flint, and large construction gangs in erecting the overhead trolley and transmission system. The electrification work of the Pennsylvania exceeds in magnitude any previous undertaking for railroad operation in the world.

BROWN-WILLIAMSON TOBACCO CORPORATION, Louisville, Ky., has gone on a 24-hour basis, necessitated by the introduction of a new product. The increased schedule will provide work for more than 3000 employees.

CALDWELL SCOTT, Iron City, Ala., announces the opening of two iron ore mines at Iron City. Work will be provided for a considerable number of laborers.

HANES HOSIERY MILLS, Winston-Salem, N. C., has inaugurated an expansion program, calling for erection of a new building and installation of additional machinery. On completion of the work, more operatives will be added to the payroll.

SOUTHERN ENGINEERING COMPANY, Charlotte, N. C., B. O. Hood, president and general manager, has received contracts for steel to be used in six buildings in three Southern states, including a post office, cold storage plant, textile mill, an oil station and a school house.

SETZ-RIGHT HOSIERY MILL, Hickory, N. C., will shortly complete a finishing plant, necessitating an increase in the number of employees to more than 125.

TENNESSEE-EASTMAN CORP., Kingsport, Tenn., some time this month will begin operating its \$1,000,000 plant for the production of acetate yarn.

NEW INDUSTRIES to the number of 119 were established during the first nine months of this year, along the Missouri-Kansas-Texas Lines. They represent an investment of \$5,386,000, and extensions to present industries amounted to \$175,000, providing employment for 2251 persons and producing an estimated tonnage of 34,568 cars annually. A. E. Gilman, manager of the Industrial Development, M-K-T Lines, states: "An even more encouraging note is to be found in the fact that inquiries concerning the Southwest are greater than at any previous time in the history of our development department."

NATIONAL BOX COMPANY, Natchez, Miss., added 100 men during September, making a total of 600 workers, with all departments operating full time.

FOSTER CREEK LUMBER COMPANY, Stephenson, Miss., formerly on a two or three days a week schedule, is now operating five days a week.

NEW ORLEANS customs collections totaling \$1,903,000 during September showed a gain of 30 per cent over the corresponding month of 1930.

GREENSBORO, N. C., reports that the Blue Bell Overall Co. will engage 50 to 75 new employees upon completion of a new addition. Work to be started on an \$80,000 Coca-Cola bottling plant will provide work for about 50 men.

WALWORTH-ALABAMA COMPANY, pipe and fitting plant, Attalla, Ala., has resumed operations after a shut-down of seven weeks. About 175 men returned to work.

AMERICAN DESK MANUFACTURING CO., Temple, Texas, has completed six successive weeks of seven days each, and 24 hours daily, and has enough orders on hand to continue present operations for a long period.

U. S. CAST IRON PIPE CO., Birmingham, has increased production schedules of its Bessemer and North Birmingham plants, and it is understood orders are in hand in sufficient amount so that 400 employees at Bessemer are to be placed on a full six-day basis for the next six months. An order for 32,000 tons of pipe for Lincoln, Neb., involving about \$750,000, was recently received.

THE REPUBLIC STEEL CORPORATION has ordered three 300-horsepower adjustable speed motors with control apparatus from the Westinghouse Electric and Manufacturing Company, the order involving approximately \$30,000. These motors will furnish the drive for rolling cold strip stock of stainless steel in the tandem strip mill of the Republic's Massillon, Ohio, works.

NORFOLK NAVY YARD will build 12 boilers for two battleships, the Mississippi and Idaho, representing an outlay of \$360,000, which is in addition to the \$12,000,000 appropriated by Congress for modernizing each of the two ships.

HAMILTON-CARHARTT MANUFACTURING CO., which has been operating a temporary factory at Irvine, Ky., pending completion of a permanent plant, will shortly occupy the new factory and provide work for 100 employees. Substantial orders already have been received.

HARRIET COTTON MILLS, Henderson, N. C., have initiated full-time operations, the present schedule being 55 hours weekly. S. P. Cooper, president of the mills, looks for a steady improvement in the textile situation.

AUBURN AND CORD cars shipped in September totaled 851, or nearly double shipments of the corresponding month last year. This brings the total number of cars shipped by Auburn in the first nine months of the year to 32,896. This is the more noteworthy when it is considered that the company's total shipments for the full year 1930 were 13,693.

CEDARTOWN COTTON & EXPORT COMPANY MILLS, Cedartown, Ga., following a reorganization of the company, with Charles Brumby general manager, has engaged 250 employees after an idleness of several months.

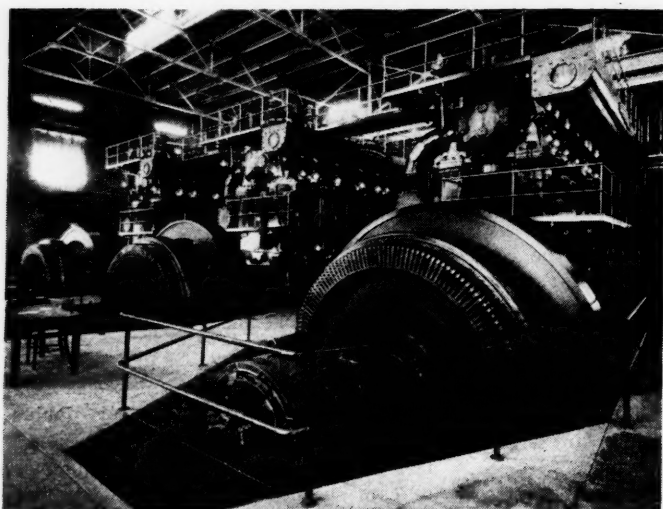
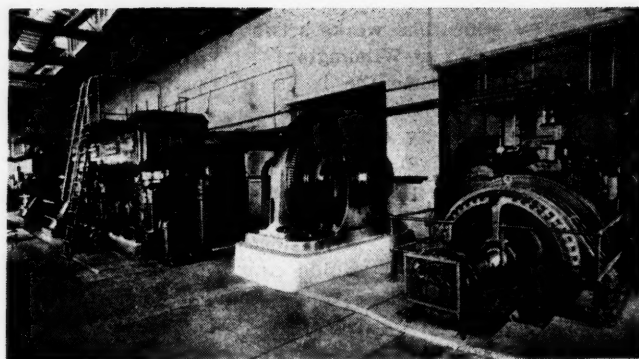
AUGUSTA, GEORGIA's building program, says the Augusta Chronicle, includes a \$300,000 Lenwood Hospital unit; a \$250,000 golf course, and more than \$500,000 for new bridges and trestles.

CELLOPHANE PLANTS located in the South have been on a three-shift basis to supply the growing demand for this wrapping material.

Diesel Power *in the* South

APPROXIMATELY 600 Diesel engines of more than 125,000-horsepower aggregate in industrial service represent only part of the Diesel installations in the Southern States as reported by M. J. Reed, research engineer of the Diesel Engine Manufacturers Association, to the MANUFACTURERS RECORD. To this number which Mr. Reed enumerates by name and location, he adds for the South an estimate of about 260 municipal electric plants containing Diesel power, also about half a million horsepower of Diesel engines used in

**Three
560-Horsepower
Fairbanks-Morse
Diesels
in
Flour
Mills
at
Yukon,
Okla.**

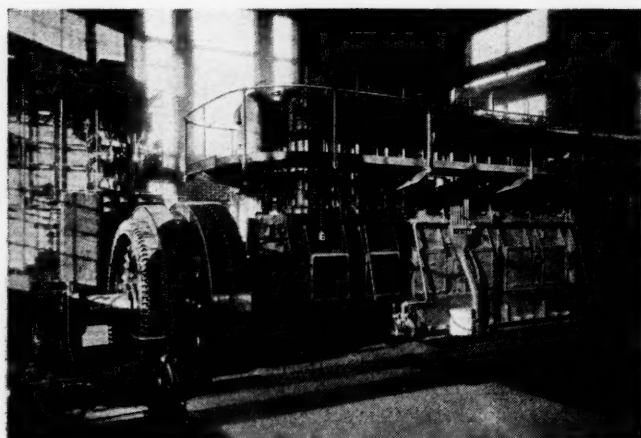


**Three
2250-Horsepower
Nordberg
Diesel
Engines,
Direct
Connected
to 2000 kv-a.
Generators
in Plant of
Commerce
Mining & Royalty
Co.,
Cardin,
Okla.**

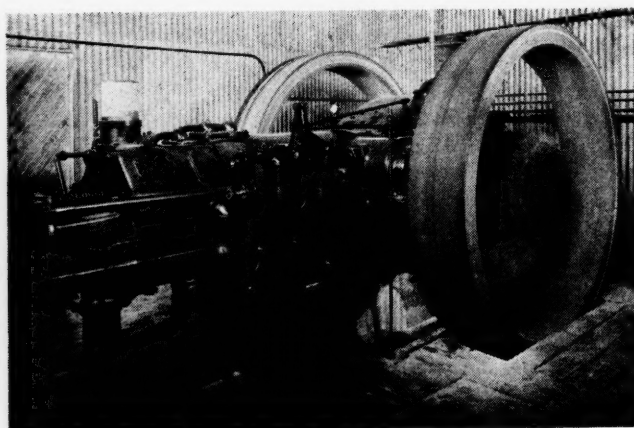
pumping oil, and a number of small Diesels in cotton gin operation, rice field irrigation and other lines.

The range of industrial plants Diesel-equipped includes such varieties as brick and refrigeration, ice-making and cement, cotton oil mills and salt mining. Also, there are Diesel ferryboats on the Chesapeake Bay and other waters, and Diesel dredges in operation in the harbor of New Orleans and in reclamation work in Florida and elsewhere.

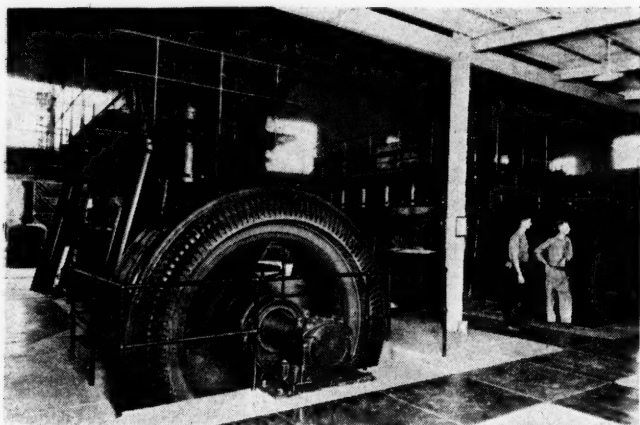
"There can be no question that the Diesel industry in America is just as modern and up to date as it is in Europe," says Representative John J. Cochran of Missouri, in a broad discussion of the subject in connection with Dieselization of the Navy. The prominence of



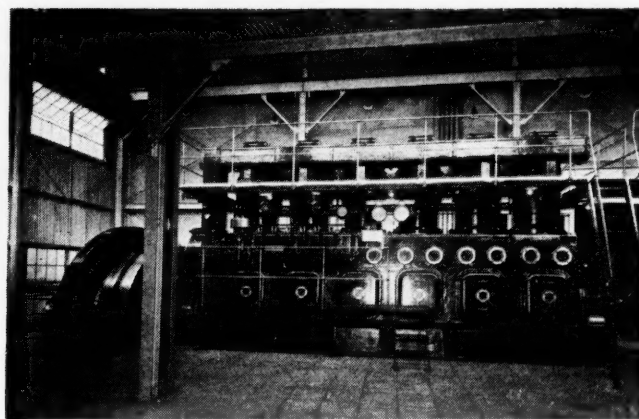
A 600-Horsepower McIntosh & Seymour Engine, Direct Connected to Generator in Power House at Moultrie, Ga.



150-Horsepower Type PO Ingersoll-Rand Engine in Quarry of H. T. Campbell Sons Co., Inc., at Texas, Maryland



Two 6-Cylinder, De La Vergne Diesel Engines, Direct Connected to General Electric Alternators and Exciters in Plant of Central Power & Light Co., at Uvalde, Texas



Six-Cylinder Model De La Vergne Diesel Engine, Direct Connected to 1000 kv-a. Westinghouse Alternator in Plant of Southern Ice & Storage Co., Houston, Texas

the South in the Diesel picture is indicated in both manufacture of such engines and their wide and varied use.

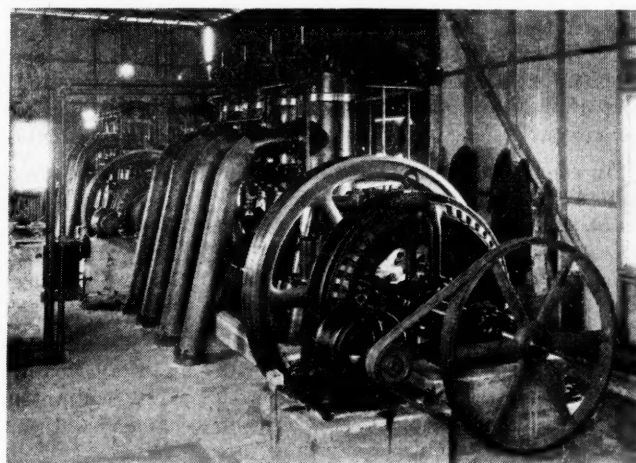
Of "a large and successful Diesel industry in St. Louis," Mr. Cochran declared that, "without the support of a single Navy Diesel engine order in 10 years, this company nevertheless has kept fully abreast with European Diesel practice." This concern obtained a license to manufacture the latest German A. E. G. solid injection double-acting Diesels with full engineering collaboration, and earlier this year had in hand a \$500,000 development program embracing the building of 3000 and 4000-horsepower, latest type, solid injection engines, and a 1000-horsepower lightweight, high-speed Diesel suitable for submarines.

Among the American Diesel engine manufacturers mentioned by Mr. Cochran were the Busch-Sulzer Bros. Diesel Engine Company, St. Louis; Hooven, Owens, Rentschler Company, Hamilton, Ohio; Nordberg Manufacturing Company, Milwaukee; New London Ship & Engine Company, New London, Conn.;

Sun Shipbuilding Company, Chester, Pa., and McIntosh-Seymour Corporation, Auburn, N. Y. Also there are the Fair-

pean plants have frequently conceded that American castings are superior to those of European plants," Mr. Cochran

The Municipal Light and Power Plant at Jonesboro, La., Is Equipped With Two 240-Horsepower Fairbanks-Morse Diesel Engines and a 180-Horsepower Unit

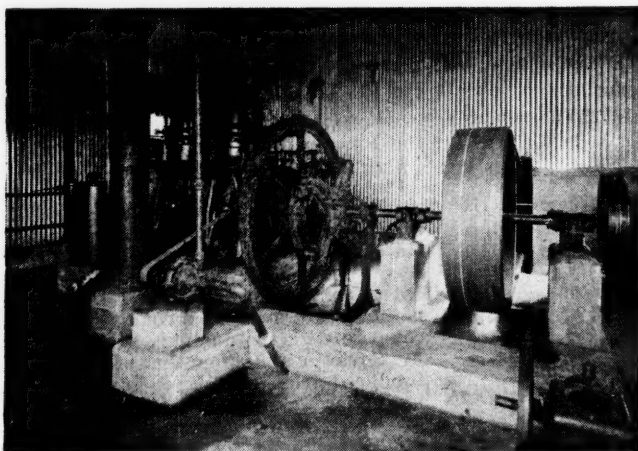


banks-Morse, De La Vergne, Ingersoll-Rand, Superior Engine Company, and other prominent concerns.

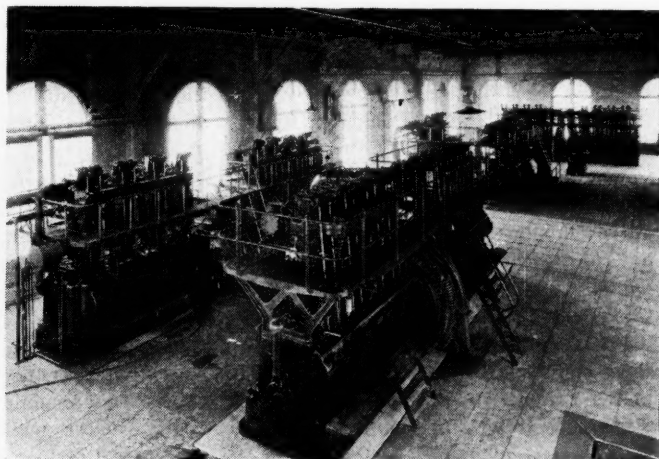
"Engineers and experts from Euro-

pean plants have frequently conceded that American-made tools are used in most of the Diesel engine manufacturing plants in Europe.

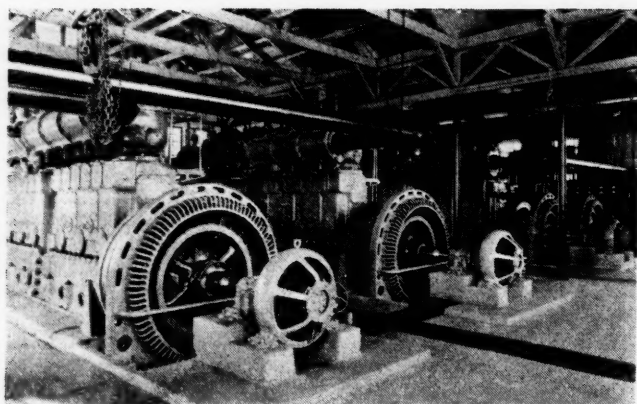
The wide variety of industries in



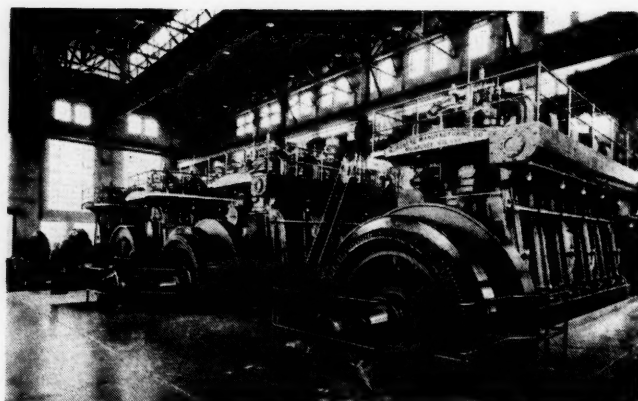
An 80-Horsepower Fairbanks-Morse Diesel in Gin of the Community Gin Co., at Riesel, Texas



Ingersoll-Rand Oil Engines in Texas, in Plant of San Antonio Portland Cement Co.



Four Worthington, 6-Cylinder, 15 $\frac{1}{4}$ x16, 2-Cycle Solid Injection Diesels in Plant of Republic Products Co., Hull, Texas



Four 1250-Horsepower Nordberg Engines Driving 1125 kv-a. Generators at Ponca City, Okla.

which the Diesel engine is utilized in the South is indicated by mention of a few installations from the great aggregate.

A great stationary Diesel installation at Cardin, Okla., is made up of three 2250-horsepower Nordberg Diesel engines for the Commerce Mining & Royalty Co., these being direct connected to 2000 kv-a. generators. This is reputed to be one of the largest Diesel plants in the country.

In tunnel work through Stone Mountain for the Louisville & Nashville Railroad, the Boxley, Bray Company used three 180-horsepower Fairbanks-Morse Diesel compressor sets, cutting a 6300-foot shaft.

The quarry of H. T. Campbell Sons Co., Inc., (Towson), at Texas, Md., with a 150-horsepower type, and the Sunbeam Quarries Company plant at Clermont, Ky., with a 560-horsepower engine, are two concerns in that line which find the Diesel effective.

Use of the Diesel in the cement industry is illustrated in Ingersoll-Rand engines in the plant of the San Antonio Portland Cement Co., San Antonio, Tex.

For the manufacture of shoes, the Newark Shoe Company, Baltimore, installed a 360-horsepower Diesel engine generating set at its Westminster, Md., plant.

The Community Gin Company, Riesel, Texas, is an illustration of the plants of that type which use the Diesel engine.

A 120-horsepower Fairbanks-Morse Diesel supplies power to pump an average of 23 oil wells, with an average depth of 1400 feet, for the Lake View Oil Company, at Sour Lake, Texas.

Flour mill equipment which includes three 560-horsepower engines is installed at the Yukon Mills, Yukon, Okla., among other such industrial plants.

The cotton oil industry is represented, for instance, in a six-cylinder model VA De La Vergne Diesel engine installed at

the Blytheville Cotton Oil Mill, Blytheville, Ark.

At the south end of Lake Okeechobee, Florida, are 17 pumping plants, of which the Clewiston plant is cited. This is equipped with two 180-horsepower Diesels, each direct connected to 54-inch Wood screw pumps. This particular plant has a capacity of 200,000 gallons per minute, and the total capacity of these drainage plants is nearly 2,000,000 gallons a minute.

A suction dredge owned by the Rapides Gravel Company, Alexandria, La., is equipped with a 240-horsepower engine, and the Diesel appears to be popular in dredging and excavating enterprises.

Foods enter into the Diesel picture in an installation by the Alamo Foods Company, San Antonio, Texas, with a VG engine direct connected to the generator.

Three three-cylinder model engines are direct connected to Frick ammonia compressors installed in the French Market Ice Manufacturing Company, New Orleans, and are representative of the use of such equipment in that line.

The Southdown Sugar Plantation in Louisiana, owned by H. C. Minor, having under cultivation more than 8000 acres of sugar cane, has installed a second 260-horsepower Diesel engine, on the strength of "the excellent performance of the original 180-horsepower unit."

Oil engines are direct connected to both a. c. and d. c. generators in the plant of the Avery Rock Salt Mining Company, Avery Island, La.

Another Diesel-equipped ice plant operation is that of J. Q. Wade, at Clanton, Ala., where a 120-horsepower Diesel clutch is connected to a pulley that drives an ammonia compressor and to an alternator which supplies the current for electrified auxiliaries.

The sandstone crushing and sizing plant of the Eastern Silica & Chemical

Company, Gore, Va., is supplied with power by a 240-horsepower Diesel.

The Diesel engine afloat is conspicuous on the ferryboat John M. Dennis, which helps to unite the eastern and the western shores of Maryland, divided by the Chesapeake Bay. Described as "one of the largest Diesel-powered ferries in the United States," the Dennis is 220 feet long and 60 feet beam, and has capacity for 1500 passengers and 100 automobiles. Two 840-horsepower Fairbanks-Morse Diesels constitute this equipment.

Also, Diesel power for motor vehicles has passed the experimental stage. A Diesel-powered automobile recently covered a mile in 53 seconds on a dirt track, and in a 500-mile race averaging 86 miles an hour only \$2.53 was expended for fuel. A Diesel-powered airplane recently landed at Jacksonville, Fla., setting a world's non-refueling endurance record of 84 hours and 33 minutes.

War Department Buys Domestic Matches

The fact that the War Department is now buying matches manufactured in the United States inspires the following comment from the Joint Conference on the Russian Situation, Inc., with offices at 501 Fifth Avenue, New York:

"For a period prior to June 30, 1931, the War Department purchased all its matches from Soviet Russia, due to the Government policy of allotting all contracts to the lowest bidder. American manufacturers were of course unable to compete with the dumping prices quoted by Soviet agents for Russian matches, produced from confiscated factories and by underpaid and forced Soviet labor. War Department contracts went to Soviet Russia and the result was serious loss to the domestic match manufacturers and unemployment among American match-factory workers."

The Way Out

[From the Washington Post.]

The first duty of the Government and people of the United States in a time of depression is to discover a plan that will remedy the situation, and then to unite in executing the plan.

Hundreds of reasons for the depression have been suggested, and thousands of remedies have been proposed. He is a poor citizen indeed who has not written to the President and the newspapers, offering a cure for hard times.

Of all the individuals in this country, President Hoover is in the best position to consider all factors in the situation. He has at his command information which is not available in its entirety to any other individual.

In addition to possessing complete information, President Hoover is peculiarly well equipped by experience and aptitude to work out a plan for remedying the situation. If he were not President, his advice and ability would be sought just the same. But he is President, holding mighty powers in behalf of the people. As President he acts for all the people, without regard to section, class, or political affiliation.

Now President Hoover has sifted out all the facts and considered all the factors, and has formulated a plan which, if executed, can and will start the process of pulling American industry out of the depression. He stands ready to exercise his powers as President to further this plan.

It is now the duty of all American citizens to join President Hoover in executing this plan. Only by united action can this plan succeed. Any proposal to substitute another plan is a move toward disaster. Mr. Hoover's plan is the only plan that can now be considered. The time for gathering information and formulating a plan is already past. The time for united action is here.

With Government agencies, financial and industrial agencies, and all citizens pulling unitedly upon the cable provided by President Hoover, the American machine can be dragged from the bog. It will move as soon as the forces of united America are applied. Once it is in motion the people will be freed from fear, and will employ their energies in a thousand directions to repair all damage and hasten recovery.

Minor adjustments may be necessary in carrying the Hoover plan into operation. But what of that? These adjustments can be made while the plan is operating. The financial corporation to be set up may require more capital. If so, capital is available. The credit of the United States Government is inexhaustible. The banking resources of the

United States are superabundant. Capital, energy, intelligence and a plan are all here. All that is necessary is for the American people to cooperate with their President.

Unity of action—that is the only factor now needed to smash the depression. The loyal union of Americans at this juncture will put an end to their misfortune.

\$20,000,000 GAS LINE

Columbia Gas and Electric Corporation
Begins Distribution in Virginia

The Columbia Gas & Electric Corporation, New York, which is building a \$20,000,000 natural gas line from Kentucky and West Virginia fields to industrial and domestic markets of the Eastern Seaboard, has practically completed a line from Eliza Forks, Ky., to the Virginia-West Virginia state line. This section is under contract for construction to the Columbia Gas Construction Company, a portion of the work in West Virginia being sublet to Ligon & Ligon, Baltimore. Minor subcontracts for hauling and ditching were awarded locally. The job is a welded coupling line, couplings having been purchased from the S. R. Dresser Manufacturing Company, Bradford, Pa., and pipe from the United States Steel Corporation, New York. The line will be operated by the Kentucky Gas Transmission Company, subsidiary of the Columbia Gas & Electric Corporation.

The first distribution project completed by the company in Virginia connects the cities of Covington, Clifton Forge and Lexington, gas having already been turned into the mains. Plans are now going forward for piping gas to Buena Vista, Culpeper, Warrenton, Manassas and the Marine base at Quantico. The Virginia lines will be operated by the Virginia Gas Distribution Company, another subsidiary of Columbia Gas & Electric Corporation.

\$3,000,000 Federal Prison Bids

El Reno, Okla.—Bids will be opened November 5 by the Bureau of Prisons, Sanford Bates, Director, Department of Justice, in the office of Jas. A. Wetmore, Acting Supervising Architect, Treasury Department, Washington, for a portion of the construction work on a \$3,000,000 Federal reformatory here. This first unit will embrace an administrative building, reception building and a mess hall, all of Colonial architecture. Other structures included in the plans are: Cell block, school, auditorium and gymnasium, hospital, dormitories, etc.

CENTRAL HEATING PLANT

Big Project to Heat 26 Government
Buildings

Washington, D. C.—General plans have been completed for a central heating plant here to serve 26 government buildings and working drawings for the big project are being pushed. These plans establish the location and arrangement of the plant as a whole, type of boilers, fuel to be used, method of firing and type and nature of auxiliary equipment, and the location and character of the distribution system. The plant will be on the block bounded by C, D, 13th and 14th streets, the building itself to extend along C street. The southerly part of the block will be used for coal storage, coal to be received in cars over the Pennsylvania Railroad tracks and delivered by a conveyor system into bunkers within the building or to the storage area. The conveyor system will also provide facilities to reclaim coal from storage and deliver it to the bunkers. The building will be in keeping with other government structures in the vicinity, with low stack so treated as to harmonize with surroundings and the requirements of the Fine Arts Commission.

Bids will soon be invited by the Treasury Department, Jas. A. Wetmore, Acting Supervising Architect, for four boilers which will constitute the initial installation. These will be of the inclined straight tube type fired by underfeed stokers and designed to burn bituminous or semi-bituminous coal, each boiler to have a maximum generating capacity of 215,000 pounds of steam per hour. They will be operated at relatively low ratings and special care has been taken to install apparatus to control the emission of dust and cinders. At their designed rating for the maximum load, it is said, the installation will meet Washington requirements relative to the smoke nuisance. Steam will be distributed to buildings through an underground system of piping in existing and new tunnels and conduits having an aggregate length of approximately four miles.

Contracts for the building and distribution system, as well as for the boilers, are expected to be awarded during the fall or winter. The United Engineers & Constructors Inc. of Philadelphia are handling engineering design and supervision under the general direction of the Acting Supervising Architect of the Treasury Department.

The Veterans Administration, Washington, awarded general contract to the J. S. McCauley Company, Atlanta, Ga., at \$297,765, to erect a new clinical building for Veterans Hospital, at Augusta.

Pennsylvania Railroad Contracts for 20-Year Supply of Electric Power

THE Pennsylvania Railroad has consummated a 20-year contract with the Consolidated Gas, Electric Light and Power Company of Baltimore, covering its entire electrification requirements from the Susquehanna River at Havre de Grace, Md., to Washington. Power for the railroad line between these two

Baltimore, including the new Gould Street station, have a capacity of 346,000 horsepower.

Work involved in completing electrical plants, transmission lines, railroad electrification installation, etc., is progressing rapidly, it is said, with more than

The Safe Harbor project is one of the largest hydro-electric developments in this country, involving the construction of a dam and power house about a mile long. The project calls for 1,720,000 cubic yards of rock and earth fill excavation and the delivery of 15,000 carloads of materials needed for construction. Some 14,000 carloads of crushed stone for concrete and ballast are produced at the company's quarry adjacent to the development. Twenty miles of standard gauge railroad track are in temporary service for construction purposes, while railroad hauling equipment includes 12 steam saddle tank locomotives, weighing from 40 to 60 tons each, eight 10-ton gasoline locomotives, 9 flat cars, two railroad hopper cars, sixty-five 12-yard air-dump cars, eighteen 6-yard air-dump cars, 7 steam locomotive cranes and crawler-mounted shovel equipment.

Compressed air for the job is furnished by a central compressor plant having 6 electrically driven compressors with a total of 4500 cubic feet of air per minute at 100 pounds pressure. Electric power to operate construction equipment is obtained by a 33,000-volt transmission line from the Holtwood plant, about 8 miles down stream. Upon the completion of the Safe Harbor plant it

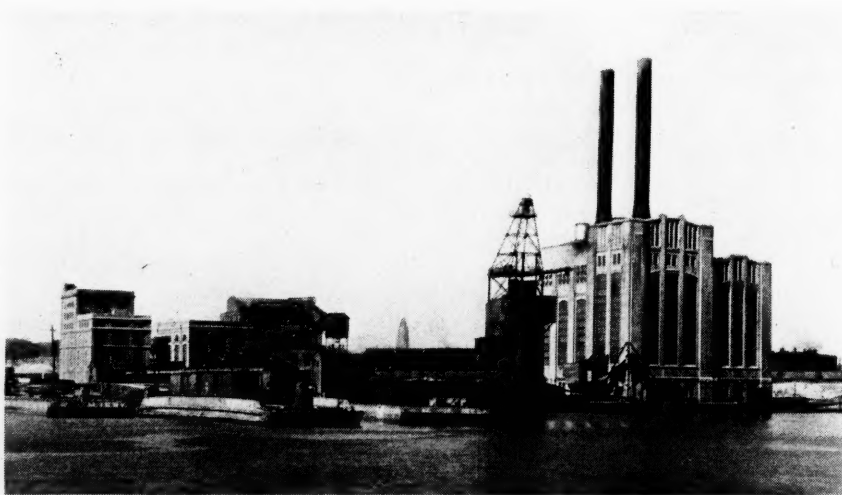


Hydro-Electric and Steam Plant at Holtwood, Pa.

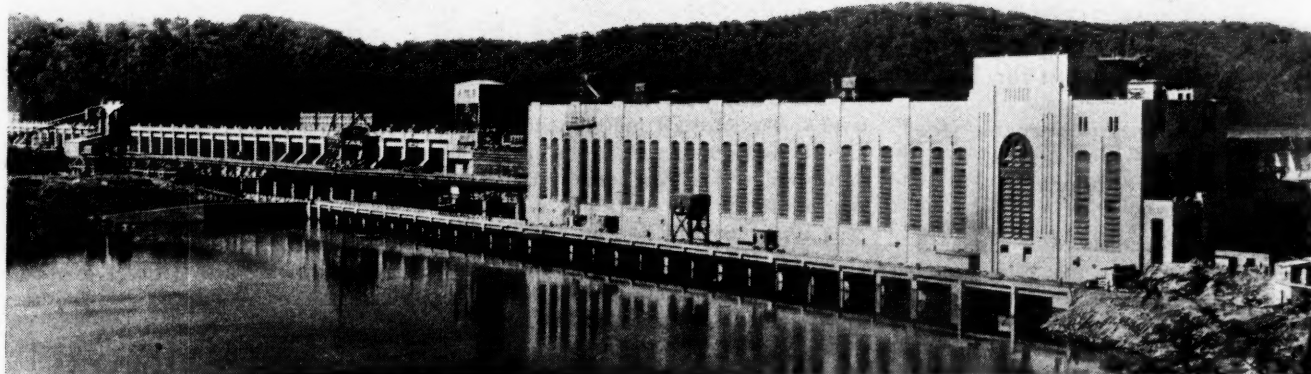
points will be delivered early in 1933, it is announced, and as electrification develops on this and adjoining sections of the railroad, this agreement will represent one of the largest power sales ever covered in a single contract, bringing to the Baltimore company an estimated revenue of \$4,000,000 annually.

Current will be supplied to the railroad by the Consolidated Gas Electric Light and Power Company and its two affiliated companies of the Aldred group—the Pennsylvania Water and Power Company and the Safe Harbor Water Power Corporation, the former operating a hydro-electric and steam power project at Holtwood, Pa., on the Susquehanna River, of 180,000 horsepower capacity, while the latter is building a \$30,000,000 hydro-electric plant at Safe Harbor on the Susquehanna River for an initial capacity of 255,000 horsepower and an ultimate capacity of 510,000 horsepower. Steam stations of the Consolidated Gas Electric Light and Power Company of

5000 men on payrolls. Construction is expected to be entirely completed in 1933.



Gould Street Steam Driven Power Station of the Gas and Electric Company, Baltimore



\$30,000,000 Hydro-Electric Development at Safe Harbor on Susquehanna River

will be interconnected with Holtwood and the two plants will be operated in effect as a single development. There are bunk houses in the labor camp to care for 700 men, two dormitories with 34 single rooms each for engineers, officers and foremen, 10 cottages for general foremen and families, dining hall to seat 600 men and staff dining room for 110 men. A water supply system and filtration plant provide water for the camp, fire protection and industrial purposes. A 220,000-volt transmission line will connect the plant with the Baltimore system of the Consolidated Gas, Electric Light & Power Company. This is also being built by

the Safe Harbor Water Power Corporation. The design of the entire Safe Harbor project was handled by engineers of the Safe Harbor Water Power Corporation, who are also supervising field work and will have charge of electrical and mechanical installations. Construction is being handled by the Arundel Corporation, Baltimore.

The Gould Street station of the Consolidated Gas Electric Light & Power Company is equipped with two 48,000 horsepower generators, with provision for the installation of two similar units later. Hydro-electric capacity of the

Holtwood development is 150,000 horsepower, while the steam plant of that development generates 30,000 horsepower. Initial installation of the Safe Harbor development, together with the Holtwood plant and the Baltimore plants will provide about 750,000 horsepower generating capacity and upon completion of the Safe Harbor project about 1,000,000 horsepower will be available. It was only through the coordination of all these plants, it is said, that the Consolidated Gas Electric Light & Power Company was able to meet the requirements of the Pennsylvania Railroad for its power supply.

General Electric Employment

The General Electric Company, through President Gerard Swope, has offered its shop employees a plan designed virtually to guarantee them six months employment, beginning November 1. The proposal was presented to employees who are members of the company's unemployment pension plan. Approximately \$1,000,000 is said to have been distributed to General Electric unemployed during the 10 months since December 1, 1930, when such emergency payments were started. Half of this was contributed by the employees working half time or more and the other half by the company.

The plan as described by Mr. Swope is to so divide the work that there will be no further layoffs for lack of work between November 1, 1931, and April 30, 1932, without compensation; and that all those on the payroll November 1, 1931, will receive during this period not less than the equivalent of half of their average weekly earnings for full time, but in no case more than an average of \$15 a week. If actual earnings are above

that average, however, the employee is to receive his actual earnings.

Employees are to be assigned work outside their regular work, if necessary, at the prevailing rates of pay for such work. The unemployment emergency fund, operating since December 1, 1930, is to be augmented by increasing the contributions of 1 per cent of earnings now being made by all employees who are working more than half time to 2 per cent, the company increasing its own contribution to match these of the men. If these two methods are inadequate, the board of directors will be asked to authorize additional payments by the company to the unemployment emergency fund without increasing the employees' contributions to the fund.

Freight Car Requirements

The fourth quarter forecast of freight car requirements for 29 principal commodities has been issued by the American Railway Association. Carloadings estimated for the last quarter of 1931 for the entire country amount to 6,153,250 compared with the actual shipments

of 6,661,750, or a decrease of 7.6 per cent, compared with the corresponding period of 1930.

In the Southeast, comprising Virginia, the Carolinas, Tennessee, Georgia, Florida, Alabama, and Mississippi, carloadings are expected to be about the same as last year, 656,868 as compared with 657,182. And in the Southwest, including Texas, most of Oklahoma, Arkansas and Louisiana, the expected decrease is 1.6 per cent, 494,231 as compared with 502,175. These two regional divisions make a better showing than any other part of the country.

The carloadings forecast for the fourth quarter in other regions and the percentage of decrease compared with 1930 are as follows:

	1930 Actual	1931 Estimated	Per Cent Decrease
New England..	154,201	146,779	4.8
Atlantic States*	798,582	776,914	2.7
Allegheny region	821,832	744,244	9.4
Great Lakes...	382,017	348,661	8.7
Ohio Valley...	774,212	708,553	8.5
Mid-West	1,020,459	904,086	11.4
Northwest	349,338	284,174	18.7
Trans-Missouri-			
Kansas	371,464	350,379	5.7
Central West..	332,282	300,545	9.6
Pacific Coast..	279,146	241,519	13.5
Pacific North-			
west	218,860	196,297	10.3

* New York and part of Pennsylvania southward to Virginia.

IRON, STEEL AND METAL MARKET

Action in Washington for Protection of Banks Encourages Steel Producers

Pittsburgh, October 12—[Special.]—Steel producers feel greatly encouraged over last week's constructive action taken at Washington for protection of the banks. For quite a while they have felt that steel buying was materially impeded by the extreme conservatism of bankers, causing steel buyers to carry extremely and inconveniently small stocks and to order in such small quantities as to increase mill cost in filling the orders. The reaction of steel buyers to the Washington developments cannot be observed so early.

Production of Bessemer and open-hearth steel ingots in September is officially reported at 1,547,602 tons, representing 28.02 per cent of capacity, this percentage conforming very closely to the average of the weekly estimates made in this correspondence. Last week's production may be estimated at 28 per cent, the same as in preceding weeks. Chicago showing an increase of three points while other districts, including the Pittsburgh district, fell off a trifle.

There was a particularly large drop in production in June, while there was about three points further drop in each of the next three months, to the 28 per cent rate just reported for September. The high month of the year was March, at 54.20 per cent.

Following the recent buying of 45,000 tons of rails by Chesapeake & Ohio, Atlantic Coast Line has issued an inquiry for 25,000 tons and Sante Fe is expected to inquire for 60,000 tons shortly. It is past the usual time for opening of the annual rail buying movement but in existing circumstances rails are doing fully as well as mills expected. Continental Construction Company, just completing a 24-inch natural gas line from Texas to Chicago, is inquiring for 170 miles of 20-inch pipe, to make the beginning of a second line.

Ford Motor Company has been in the market for a large tonnage of steel and it is inferred that the new model will get into production much earlier than indicated by some recent reports. The company's policy has always been secretive and the trade has marveled how such a large organization could function smoothly and have no leaks. There is a report now that samples of the new model will be put on exhibition in less

than a fortnight. Other producers in general are saving new models for a later time. Ford getting into active production would help general business in a noticeable way on account of the wide ramifications.

The reduction of 25 cents a box or about \$5 a ton in tin plate effective October 1 and reported a week ago has not made a ripple in the steel market generally, as tin plate follows its old style of having an annual price announcement, the preceding change having been for October 1, 1930, also a 25-cent reduction. The present reduction was inevitable and the new price applies to next season's deliveries.

The nail market is very firm at the advance made some time ago, to \$1.90 to jobbers and \$2.00 to retailers and consumers buying in carload lots. Sheets and strips are readily holding their advances of a few months ago, while bars, shapes and plates have been at 1.60c since last December, there being an asking price a dollar a ton higher in the fore part of the year. The 1.60c price has just been tested by its being bid generally on an inquiry by the New York Central.

The Pittsburgh district scrap market is a shade easier, heavy melting being quotable off 25 cents, at \$10.25 to \$10.75. The market can hardly go down further and has plenty of room for advance as outcome is very light.

Lower Prices on the Metals

New York, October 12—[Special.]—The highlight among the metal markets has been the sudden spasm of weakness in the lead market, reductions of \$8 per ton having been made to the price of 4 cents per pound. New York, the first price change in lead since June 25. The present price of lead compares with 3.75c per pound, New York, on May 11 and hence no new low for the year was reached during the past week. Zinc prices have yielded \$2 per ton since our last report, being quoted now at 3.50c per pound, East St. Louis, which represents a decline of \$3 per ton for the week.

Tin hovers around the lowest price levels since 1899, or around 22 cents per pound. Only copper among the major metals has been unchanged, selling at 7 cents per pound, though there is little consolation to be derived from the price stability inasmuch as the metal is at the lowest level on record and two cents

per pound below what had been the low point of other days.

A better feeling existed among the metals as among other commodities and securities following the Hoover plan for making frozen assets liquid. However no higher prices have resulted. Industrial conditions are perhaps a shade brighter. Prospects in the steel industry are a trifle more encouraging.

Building and housing projects continue active. The formal opening at New York of the new Waldorf-Astoria reminds the metal trade that an unusual amount of metal work is contained in the magnificent structure, particularly for artistic purposes. The largest amount of nickel in the form of alloys that ever entered one structure is contained therein.

A delegation of foreign copper company officials will arrive at New York late this month to plan further curtailment of production. It is planned perhaps to cut production by 30,000 to 50,000 tons monthly, or by 25 to 30 per cent. An alternate plan is to shut down the entire copper industry for a few months, though the majority feel that the more practical idea is to keep operating at a snail's pace. Domestic demand was fair on a few days. Export business has been rather light though on Tuesday over 900 tons were sold, the best in several days. It is easy to imagine higher prices for copper if the forthcoming conferences have even a partially successful complexion.

Purchasing of the metals has been a little more brisk. The week's sales of lead have been the second best in the past three months, consumers having purchased as prices declined. Copper sales have also been better than for the preceding week. However sales abroad have been comparatively light, totaling 4000 tons for the first ten days of October. Tin demand was exceedingly small, however, because of the erratic fluctuations of sterling exchange.

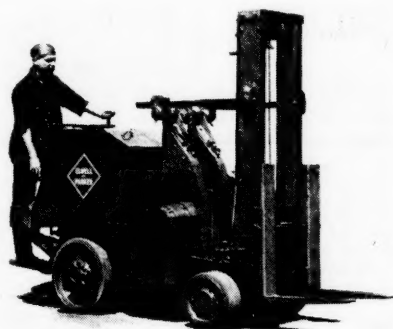
Prices of lead and zinc ore have dropped after having held steady for many weeks. Lead ore is off \$5 per ton at \$45 in the tri-State district, while zinc ore is down \$1 per ton. Declines in both cases were due to the lower prices on the refined metals.

Zinc statistics for September showed a gain in surplus stocks of 454 tons. Shipments were nearly 3000 tons less than in August and the smallest for many years. An unfavorable interpretation of the statistics was in large measure responsible for the decline in zinc prices.

NEW AND IMPROVED EQUIPMENT

Elevator-Chisel Truck

The Elwell-Parker Electric Company, Cleveland, Ohio, has developed a 6000-pound capacity elevator-chisel truck to meet a demand for an electric lift truck of large capacity. It is built to accommodate either a battery or gas-electric



Electric Lift Machine of Large Capacity

unit for power purposes, all safety features being retained in the gas-electric and the electric controller, avoiding the use of either clutch or transmission and thus eliminating much wear and tear on the equipment. The truck is driven by motor through worm and gear, all power transmission parts between motor and wheel being heat treated alloy steel, except the phosphor bronze worm wheel. Drive wheels are 22 inches in diameter, said to be the largest used on electrical industrial trucks. The trail axle is of the knuckle type, centrally pivoted, so that the load forks in front of it are level even though the wheels are not on level floors. Forks are made in various lengths with varying spreads to accommodate different materials, and when higher tiering is necessary, uprights are made longer. Telescopic uprights also may be furnished. Tilt and hoist features are accomplished by one unit. The lift is by cable, while the positive tilt is by rack and pinion drive.

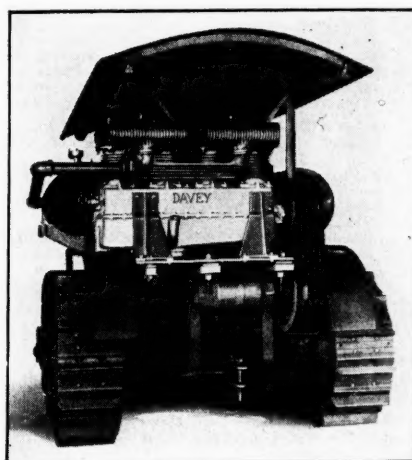
New Burroughs Adding Machines

The Burroughs Adding Machine Company, Detroit, Mich., will exhibit 75 machines at the National Business Show in New York, October 19 to 24. These will include a number of new machines and developments never shown before, including cash and counting machines, as well as new short-cuts in mechanical counting developed during the past year. Twelve types of cash machines will be

displayed, while accounting machines will include a new rotary magazine register machine with 20 registers. There will also be various other types of accounting machines, including the newest Burroughs machines for banks and insurance companies and a tax accounting machine for computing real and personal property taxes and writing tax bills in one operation. In addition there will be desk adding machines, and a special display of electric calculators and posture chairs. The exhibit will be in charge of J. L. Stewart and J. F. Kastner of Detroit, assisted by members of the Burroughs New York agency.

Portable Air Compressor

The Davey Compressor Company, Kent, Ohio, has developed a 310-cubic foot, 4-cylinder, air-cooled portable air compressor, for mounting on the "Caterpillar" Sixty tractor, the mounting consisting of steel extensions which bolt to the tractor frame at the rear of the tractor and out of the way. This mounting and location do not interfere with the normal drawbar operation, while the light weight of compressor unit and mounting does not interfere with tractor balance or pressure of the treads. The compressor drive is by the tractor engine



Davey Compressor on "Caterpillar" Sixty

through 5 V-belts and the standard "Caterpillar" stationary drive which embodies a clutch. The cushioning effect of this drive absorbs the pulsating compressor torque and eliminates undue wear or strain on the mechanism. It also permits the compressor to be started or stopped instantly by a slight movement of the clutch lever.

Welding Fittings

The Midwest Piping & Supply Company, Inc., St. Louis, Mo., announces a new line of welding fittings, described as a development of primary importance, in that they reduce the cost of many types of piping systems in addition to improving such systems. These new products include welding ells of 90 degrees and 45 degrees, welding head, welding saddle and welding sleeve. An accompanying illustration shows the Midwest welding saddle, said to increase greatly the strength of the header. The neck is welded to the body primarily for tightness and the saddle is slipped down the neck until it fits snugly against the body. It is then welded into place with a heavy bead. The saddle is not designed for tightness, but to relieve the weld between the neck and body of the greater part of the tensile, bending and shearing stresses to which it would otherwise be subjected. Dimensional accuracy and uniformity are stressed as important features of the welding ells which are made in one piece, while the



Midwest Welding Saddle

Midwest welding head, of ellipsoidal form, is designed to reduce unit stress in the metal to a minimum. The Midwest welding sleeve is used to reinforce a butt line between two pieces of pipe, the sleeve relieving the butt weld of any bending stress and much of the tensile stress. Its primary purpose is to keep the joint tight.

\$684,000 Bond Election

Amarillo, Tex.—The city commission has called a special election for November 10 on a bond issue of \$684,000 to refund city bonds and warrants. Should the issue be voted the bonds will bear an interest rate of 4¾ per cent, whereas outstanding bonds and warrants bear interest rates ranging from 5 per cent to 6 per cent.

CONSTRUCTION DEPARTMENT and NEW ENTERPRISES

Covering the initial announcements of new undertakings with additional information about enterprises previously mentioned. The date at the end of an item indicates preliminary facts were given in a previous issue.

When writing to a new firm or corporation the name of at least one of the incorporators should be placed on the envelope to expedite its handling by the local postoffice. Mail may be delayed unless complete address is given.

Building and Construction Proposed and Contracts Awarded; Manufacturing, Mining, Power, and Land Developments; Public Works; Transportation; Communication; Financial Enterprises; New Business Opportunities Reported in the Sixteen Southern States.

The Daily Construction Bulletin of the Manufacturers Record gives each business day advance news published in this weekly review. It is invaluable to those requiring prompt information. Subscription price \$40.00 a year.

Airports, Airplane Plants, Etc.

Ala., Maxwell Field—Louis Gertner, 8233 Harper Ave., Chicago, Ill., reported, has contract for boiler plant, distribution system and steam conduit; 300,000-gal. tank on 100-ft. tower, Chicago Bridge & Iron Works, 37 W. Van Buren St., Chicago; radio bldg., Algernon Blair, First Natl. Bank Bldg., Montgomery; est. cost, \$63,785. 9-24

Ark., Little Rock—Hunter Airways, Inc., Dr. L. M. Hunter, Pres., 1106 Center St., reported, plans Little Rock to Hot Springs passenger air line. 10-1

Fla., Miami—Keystone Builders Corp., Box 1678, West Palm Beach, reported, low bidders for hangar leanto, Bureau of Yards and Docks. 10-1

Ga., Brunswick—City, Hugh Burford, City Sec., authorized by Legislature to issue \$150,000 bonds. 7-30

Ky., Bowman Field—Constructing Q. M. receives bids Nov. 3 for constructing double air corps hangar with annexes and boiler house annex; cost \$61,207. 9-3

N. C., Durham—City, Delos W. Sorrell, Mayor, reached preliminary agreement with County Commrs. and officials of Duke University to build landing field; Duke University to lease about 200 acres to city; will not at present time construct hangars, offices, or administration buildings; R. R. Markley & Co., Architects, Alabama & Woodrow Sts., Durham. 10-8

Okla., Fort Sill—See Want Section—Bids Asked.

Okla., Oklahoma City—City, H. B. Warner, Commr., reported, may construct airport; plans being prepared by engineering department; \$23,000. 9-3

Okla., Tulsa—City, J. P. Ligon, Park Dept. Engr., W. F. McMurry, Consult. Engr., plans hard surface runway, wind tee for night operations; Howard Frye & Co., 1111 S. Florence Place, has contract for septic tank; Charles W. Short, Jr., Airport Mgr. 9-3

Tex., Childress—American Railways Co., 122 E. 42nd St., New York, reported, leased site for landing field.

Tex., Galveston—Johnson Bros. Construction Co., Guaranty Bldg., has contract for administration building and hangar. 9-24

Tex., Port Arthur—Aviation Site Committee, W. A. McIntyre, Munger T. Ball, reported, plans developing lake front airport. 9-3

Va., Langley Field—A. G. Pinkston & Co., Essex Bldg., Norfolk, reported, has contract at \$23,980, for water and drainage system for hangar and barracks.

Va., Langley Field—M. H. Sobel Co., 1031 1st Natl. Bank Bldg., Detroit, Mich., Gen. Contr. for 10 Air Corps Hangars with annexes, connecting bays and boiler house, etc., let following contracts: Terra cotta, Atlantic Terra Cotta Co., 19 W. 44th St., New York; glass and glazing, Bldg. Supplies Corp., 1900 Monticello Ave., Norfolk; steel sash, Detroit Steel Products Co., 605 Stevens Bldg., Detroit, Mich.; erection of steel sash, Fenestra Constr. Co., 2250 E. Grand Blvd., Detroit, Mich.; roofing and sheet metal, Philip Carey Co., 1715 Summit Ave., Richmond; caulking and dampproofing, Guarantee Waterproofing Co., Prescott St., Greensboro, N. C.; pile driving, F. A. Hulcher, 290 LaSalle Ave., Hampton, Va.; terrazzo, J. D. Parrish & Co., 207 Washington St., Portsmouth; painting, Paint-

ing & Sheet Service Co., 604 Penobscot Bldg., Detroit, Mich.; excavating and grading, F. J. Gannaway, 1119 Larchmont Crescent St., Norfolk; foundations completed; erecting steel and brickwork. 8-6

Va., Langley Field—Office Constructing Q. M., reported, rejected bids for roof on A. C. hangars and bays. 9-3

Va., Langley Field—Constructing Q. M. rejected bids for 2 air corps warehouses; receives new bids Oct. 26; Capt. George H. Schumacher, C. Q. 10-8

Bridges, Culverts and Viaducts

Proposed Construction

Ala., Birmingham—City, A. J. Hawkins, City Engr., probably let contract in Dec. for \$21,000 conc. steel viaduct, 70 ft. wide over Southern and Frisco tracks, 11th Ave., North, 100 ft. long.

La., New Orleans—Following estimating on rein. conc. floor system and widening roadway area Newton St. viaduct, Algiers, bids due, Office City Purchasing Agt., Room 24, City Hall, Oct. 20; H. N. Moody, 815 Perdido St.; Dalgarn Construction Co., Louisiana Bldg.; Concrete Construction Co., 1903 Gallier St.; H. W. Bond & Bro., 516 Howard Ave.; Lionel F. Favret, Dryades and Gravier Sts., and A. P. Boh & Co., 837 Perdido St. 10-8

Md., Baltimore—City, B. L. Crozier, Ch. Engr., has low bid from Victor A. Pyles Co., Brooklyn, Baltimore, at \$53,874, for reinforcing Hanover St. bridge. 10-1

OKLAHOMA—State Highway Comsn., C. L. Wilson, Highway Engr., Oklahoma City, plans 3 bridges in following counties:

Le Flore—1-span, 160-ft., steel truss bridge on conc. piers, Hodgins, \$35,000;

Beckham—9-span, 146-ft. bridge, Sayre, \$27,000;

Dewey—8-span, 132-ft., rein. conc. bridge, \$27,000.

Okla., Tulsa—City, Earl Logan, City Aud., and State Highway Comsn., L. C. Wilson, Highway Engr., Oklahoma City, plan widening 14,700 ft. bridge, 30-ft. roadway and 2 5-ft. sidewalks to 40-ft. roadway and one 7-ft. sidewalk and street car tracks over Arkansas River, Quannah Ave., \$250,000; Wood & Witten, Engrs., Lynch Bldg.

South Carolina—State Highway Comsn. has low bids for 7 bridges. See Roads, Streets and Paving.

S. C., Greenville—State Highway Comsn., Ben M. Sawyer, Ch. Commr., Columbia, drawing plans for 3 bridges over Southern and P. & N. Railways; 36-ft. roadway, two 4-ft. sidewalks, 99, 171 and 138 ft. 6 in., rein. conc., steel; \$60,000.

TEXAS—State Highway Comsn., G. G. Wickline, Bridge Engr., Austin, opens bids Oct. 19 and 20 for bridges in following counties:

Nueces-San Patricio—2 steel, conc. bridges over Nueces River, 130-ft. steel through truss span and 63 30-ft. 6-in. conc. deck girder spans (spandrel design), 22-ft. roadway, total length 2053.33 ft., 2 conc. caisson type piers on untreated timber foundation piling, approach span substructure of composite untreated timber and cast in place conc. pile construction; Nueces River relief

bridge, 10 30-ft. 6-in. spans, same construction as for river bridge, total length 305 ft.; alt. type of composite timber and precast conc. pile substructure provided for both types, SAP 886-G;

Cherokee—large bridges, Highway 22 between Neches River bridge and about ¼ mi. east of Maydelle, total length 240.5 ft., 12 20-ft. spans, 22-ft. roadway, steel I-beam stringers, conc. floor slabs, treated timber pile substructure, over Faires Creek, 2118 yd. excavation, 1350 lin. ft. 16-lb. treated timber piling, 149.22 yd. A conc., 27,816 lb. rein. steel, 6908 lb. struc. steel, 480 lin. ft. rail, SAP 251-A;

Fisher—3 bridges of 28-ft. 6-in. conc. girder spans, 22-ft. roadway, on precast conc. pile substructure, Highway 83 west of Roby, total length 541.5 ft., 4 spans over Alkali Creek, 8 over Buffalo Creek and 7 over Elm Fork, Brazos River, 448.58 yd. A conc. (girder and slabs, 110.40 yd. A conc. (bents, 153.429 lb. rein. steel, 1083 lin. ft. conc. rail, low type, 2642 lin. ft. 15-lb. square precast conc. piles, 115 cu. yd. grouted rip rap;

Kendall—bridge over Cypress Creek and approach, 11 28-ft. 6-in. conc. deck girder spans, 22-ft. roadway, conc. substructure, approaches 36-ft. crown width, Highway 27, intersection Highway 9 and 23 through Comfort to Kerr County line, 12,922 cu. yd., 14,314 cu. yd. excavation, 752.89 cu. yd. A conc., 163,292 lb. rein. steel, 627 lin. ft. conc. rail (low type);

Pecos—bridge over Comanche Creek and roadway approaches, 17 28-ft. 6-in. conc. deck girder spans, 22-ft. roadway, conc. bents and abutments, 1 mi. east Fort Stockton, 7566 cu. yd. excavation, 7821 yd. borrow, 882.93 yd. A conc., 200,052 lb. rein. steel, 969 lin. ft. conc. rail (low type);

Wheeler—2 bridge, Highway 4, 24.5-ft. steel I-beam spans, steel I-beam stringers, conc. floor slabs, timber piling substructure, 5 spans over Gageby Creek, 12 over Sweetwater Creek.

Texas—State Highway Comsn. plans 2 bridges. See Roads, Streets and Paving.

Tex., Amarillo—City, W. N. Durham, and Chicago, Rock Island & Pacific Ry., W. H. Petersen, Ch. Engr., Chicago, Ill., plan rein. conc. viaduct, Eighth Ave.; E. N. Stanley, Engr., Amarillo.

Tex., Childress—State Highway Comsn., G. G. Wickline, Bridge Engr., Austin, opens bids in October for \$300,000 conc., steel bridge over Red River.

Tex., Houston—City, Office of City Sec., opens bids Oct. 21 for 75th St. St. subway under G. H. & H. R. R. Co. tracks; plans at office City Engr. 10-8

Tex., San Antonio—Bexar County, W. S. Goodman, County Engr., opens bids Oct. 19 for low water bridge, Devine road over Olmos Creek.

Virginia—See Roads, Streets and Paving.

Contracts Awarded

Maryland—State Roads Comsn., L. H. Steuart, Sec., Baltimore, plans bridge over Neal's Creek, connecting Cob Island, Charles County, with mainland.

Miss., Natchez—State Highway Comsn., C. M. Williamson, Dir., Jackson, probably call for bids soon for conc. and steel bridge to replace collapsed structure, Natchez-Kings-ton branch, Highway 61.

Mo., St. Louis—Missouri Pacific R. Co., W. A. Hopkins, Gen. Pur. Agt., inquiring for 500 tons struc. steel for miscellaneous bridge work.

Tennessee—State Dept. of Highways and Public Works receives bids for 10 bridges. See Roads, Streets and Paving.

Tex., Corsicana—Navarro County Comms. Court let contract to Hannah Construction Co., Waco, for 554-ft. conc. trestle, Richland Creek, Corsicana-Ward Bridge Lateral road, Consolidated Road Dist. No. 1, at \$13,826; A. F. Mitchell, County Engr. 8-13

Coal Mines and Coke Ovens

Va., Doran—Harman Red Ash Coal Corp., incorporated; J. N. Harman, Tazewell.

Va., Richmond—E. T. Long Coal Co., capital \$15,000, incorporated; E. T. Long, 1011 Brook Road.

Cotton Compresses and Gins

Ga., Soperton—Estroff Cotton Warehouse will probably rebuild building.

N. C., Newton—Newton Bonded Warehouse Co., Inc., organized by David Gaither; construct warehouse; brick; fireproof; capacity 3,000 bales.

S. C., Columbia—Standard Warehouse Co., T. B. Stackhouse, Pres., L. & E. Bank Bldg., let contract to L. F. Wolfe, Orangeburg, for cotton warehouse; 100x125 ft.; mill construction; conc. and wood floors; comp. roof.

Tex., Dallas—W. L. Patton Co., Thomas Bldg., incorporated; W. J. Ward, J. C. Adams.

Tex., Houston—Houston Compress Co., Cotton Exch. Bldg., reported, construct 3 warehouses Anderson St.; frame; floor area 166,800 sq. ft.; \$72,000.

Drainage, Dredging and Irrigation

Ga., Brunswick—U. S. Engr. Office, Savannah, has low bid from Atlantic, Gulf & Pacific Co., 15 Park Ave., New York, at \$38,336, for dredging 320,000 cu. yd. from East River, Brunswick Harbor.

Miss., Gulfport—U. S. Engr. Office, Mobile, rejected bids for 3,400,000 cu. yd. material, Gulfport ship channel and anchorage basin; work will be done by government plant and hired labor. 9-3

Texas—U. S. Engr. Office, Galveston, opens bids Nov. 24 for dredging La. and Tex. Intra-coastal Waterway through parts of Chambers and Galveston Counties, U. S. reference line Sta. 1625, near High Island, to reference line Station 3136, Galveston Bay, near Port Bolivar, approx. 8,468,500 cu. yd.

Tex., Galveston—U. S. Engr. Office opens bids Nov. 4 for dredging approx. 3,251,000 cu. yd. material, maintenance, Galveston Channel.

Tex., Galveston—U. S. Engr. Office call for bids within few days for dredging approx. 10,000,000 cu. yd. material on eastern end Galveston-Port Arthur section, Intra-coastal Canal; bids to be opened late in November or early in December.

Tex., Houston—U. S. Engr. Office, Galveston, has low bid from Atlantic, Gulf & Pacific Co., 15 Park Row, New York, at \$175,644, for dredging in Houston Ship Channel between Morgan Point and Red Fish Reef. 9-17

Texas—U. S. Engineer Office, Galveston, opens bids November 4 for dredging approx. 1,000,000 cu. yd. material in channel from Galveston Harbor to Texas City.

Electric Light and Power

Electric light and power work in connection with many LAND DEVELOPMENT operations involves the expenditure of large sums of money. See that classification for details.

Alabama—Alabama Power Co., Birmingham, reported, applied to Dist. Engr.'s Office, Chattanooga, Tenn., for permit to erect overhead transmission line across Tennessee River 1 mile below Wilson Dam.

Ark., Pine Bluff—Arkansas Power & Light Co. purchased following equipment and is being used in construction work in connection with transmission line Ouachita River near Hot Springs to substations, etc.; Insulators, Westinghouse Electric & Mfg. Co., Derry, Pa.; cable, Aluminum Co. of America, Massena, New York, poles and cross arms, Ayer-Lord Tie Co., Bathurst Bldg., Little Rock; hardware and bus supports, Joslyn Mfg. & Supply Co., 20 N. Wacker Drive,

Chicago, Ill.; guy strand, Graybar Electric Co., 514 Spruce St., St. Louis, Mo.; oil circuit breakers, Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa.; bus bar copper, Chase Brass & Copper Co., Inc., 312 N. Second St., St. Louis, Mo. 9-24

D. C., Washington—Plans for central heating plant to heat 26 government buildings have been completed; active progress being made on working drawings for entire project including location and arrangement of plant as whole, type of boilers, nature of auxiliary equipment, location of distribution system; will be built in block bounded by C, D, 12th & 13th Sts., S. W., building extending along C St.; southerly part of block will be used for coal storage; conveyor system from railroad to plant will deliver coal into bunkers within building or to storage area; conveyor system will also include means of reclaiming coal from storage and delivering it to bunkers; Treasury Dept. will soon call for bids for 4 boilers constituting initial installation; will be of inclined straight tube type fired by underfeed stokers, designed to burn bituminous or semi-bituminous coal, each of sufficient capacity to operate a maximum of 215,000 lbs. steam per hr., at comparatively low ratings; steam will be distributed to buildings through underground system of piping in existing and new tunnels and conduits with aggregate length of 4 miles; bids for building and for steam distribution system will be asked during fall or winter; plant will probably be ready to provide steam for heating in fall of 1933; engineering design and supervision in hands of United Engineers & Constructors, Inc., 112 N. Broad St., Philadelphia, Pa., under general direction of Acting Supv. Archt. of Treasury Dept. 5-14

Fla., Moore Haven—City, reported, rebuilding power plant under supervision T. D. Moody, Rep., Fairbanks, Morse & Co., Chicago, Ill.; install new generators, switchboards, etc. 8-13

Fla., Ocala—City, C. T. Baker, Conslt. Engr., receives bids Oct. 20 for rehabilitating power plant; furnish and install 2 Diesel electric generator units of 2000 kw. 7-16

Ga., Augusta—City Council authorized Canal Comsn. to proceed with electrification of old canal system; install 10,000 kw. Diesel engine driven power plant, to eventually serve as standby plant; install necessary power lines; Burns & McDonnell Engineering Co., Interstate Bldg., Kansas City, Mo., revising estimates. 2-12

La., Oakdale—City, reported, abandoned plans for erection power plant; accepted proposition of Louisiana Utilities Co. to furnish power. 6-25

La., St. Martinsville—City, Howard J. Durand, Sec., receives bids Oct. 13 for improving electric distribution system.

Md., Baltimore—Pennsylvania R. R. Electrification.—See Railways.

Md., St. Michaels—City, reported, will not issue power bonds authorized by Legislature. 4-23

Miss., Laurel—Eastman-Gardner Co. reported, sold power plant to Mississippi Power Co., Gulfport, Mississippi Power Co., Gulfport, advises not planning any work to power plant at Laurel; are constructing 450 kv-a. 11,000/2300 volt substation and making changes and improvements in distribution system at that location; equipment purchased; contract let to Allied Engineers, Inc.

Miss., Starkville—City votes Oct. 31 on \$102,000 power plant bonds; E. R. Lloyd, Mayor. 8-20

Okla., Pryor—City defeated \$75,000 power plant bonds. 10-1

Fertilizer Plants

Fla., Quincy—Albritton & Williams, reported, constructing cor. iron and conc. building for Gadsden Ice & Power Co., for fertilizer mixing plant and feed mill; 2 sections; portion 5 stories high.

Flour, Feed and Meal Mills

La., Shreveport—Kalmbach-Burkett Co., Inc., 1200 Daizell St., opened bids Oct. 14 for constructing feed mill and warehouse building Daizell St. & Southern Ave., replace burned building; cost \$25,000; Seymour Van Os, Archt., City Bank Bldg. 10-8

Miss., Jackson—Great "S" Mills, N. Mill St., reported, has plans by R. W. Neaf, Archt., 501 Medical Bldg., for improving plant.

Foundry and Machine Plants

Ga., Savannah—Savannah Foundry & Machine Co., W. L. Mingledorf, installing new molding machinery.

Garages and Filling Stations

D. C., Washington—Martin Bros., 1341 Connecticut Ave., reported, have contract for gasoline station for Fred Ugast at 1145 Bladensburg Rd., N. E.; 1 story; brick.

Fla., Clermont—S. B. Brantley, reported, erect 1 story, tile and stucco filling station; Howard Bailey, Supt. of Cons.

Md., Baltimore—Sherwood Bros., Baltimore Trust Bldg., construct addition to filling station, Monroe and Washington Blvd.; 1 story, brick and stucco; will probably take new bids; R. I. Welsh, Archt. and Owner; Avon Construction Co., 216 E. Lexington St., estimating.

Md., Baltimore—Continental Oil Co., Fairfield, Baltimore, reported, let contract to Mervis Constn. Co., 1650 E. Fayette St., for substructure for filling station, York Rd. & Cold Spring Ave.; 1 story; brick; rein. conc.

Md., Baltimore—Mrs. Grace Neal, reported, let contract to Wm. B. Norris, 6009 York Rd., for filling station and store alteration, 4600 Edmondson Ave. 10-8

Md., Cumberland—Tri-State Auto Parts Corp., incorporated; George L. Carney, 222 N. Mechanic St.

Miss., Leakesville—Gulf Refining Co., Mainson Blanche Bldg., construct filling station Main St.

Mo., Carthage—H. E. Williams Products Co., Central Ave. & Main St., reported, completed arrangements for manufacturing Wahl Universal Heater for motor cars; will install dies, and other equipment from Chicago.

Mo., Jefferson City—City authorized W. A. Curtis, Street Commr., to secure plans and specifications for garage and warehouse for street department Chestnut and Miller Sts.

Mo., Kirkwood—Beecher-Bieger Auto Repair Co., incorporated; D. A. Beecher, 435 W. Essex Ave.

Mo., Maplewood—Montgomery Service Corp., incorporated; Louis E. Montgomery, 6731 Arsenal St., St. Louis.

S. C., Greenville—Bailey Building Co., Contrs., erecting filling station, Main and Haille Sts., for Dr. T. A. Murray, Union.

S. C., Yemassee—Shell Oil Co., reported, construct storage plant.

Tex., Dallas—Elm Street Garage, Inc., chartered; H. P. Inge, 3908 Shannon Lane.

Tex., San Antonio—Joe Dean, Jr., 909 S. Flores St., erecting filling station Merchants Ave. & S. Flores St., Gulf Refining Co., Lessee; 1 story; brick and rein. conc.; tar and gravel roof; Morris, Noonan & Wilson, Archts., Builders Exchange Bldg.

Tex., Sherman—Gulf Refining Co. construct brick filling station, 417 S. Tavis St.

Va., Martinsville—P. S. Ford construct service station and store building Belmont and Wheeler Sts.

Va., Berkley—Berkley Motor Corp., R. L. Simpson, Pres., formed by merger Maudlin Motor Co. and Peebles & Simpson Motor Corp.

Gas and Oil Enterprises

Ala., Mobile—Coastal Petroleum Corp., Victor H. Smith, Pres., let following contracts in connection with construction of refinery: Contract covering all instruments, Brown Instrument Co., Wayne and Roberts Aves., Philadelphia, Pa. and Neilan Co., Los Angeles, Calif.; pumps, Daytona-Dowd Pump Co., National Tube Co.; Louis Allis Co., 427 Steward St., Milwaukee, Wis., for electric motor; Bigelow Liptals Co., Detroit, Mich., furnace; J. B. Devine Mfg. Co., Mt. Vernon, Ill., Gen. Contr.

Mo., Kansas City—Kansas City Industrial Fuel Gas Co., incorporated; Robt. L. Baldwin, 16 E. 66th St. Terrace.

Okla., Calvin—City voted gas system bonds.

Okla., Locust Grove—City, reported, granted natural gas franchise to Braman Oil Co., Philtower Bldg., Tulsa. 9-17

Okla., Tulsa—Howard Whitehill, World Bldg., Tulsa, and Claude C. Harmon, Nowata, reported, acquired properties of Tidal Oil Co. in Nowata and Rogers county.

Okla., Tulsa—Slack Refining Co., capital \$15,000, incorporated; Ellis Slack, Hunt Bldg.

Tex., Dallas—Gold Star Oil Co., incorporated; Carl B. Callaway, Santa Fe Bldg.

Tex., Fort Worth—Field Sims Co., capital \$25,000, incorporated; L. Sims, 2516 Sixth Ave.

Tex., Fort Worth—Mercury Petroleum Corp., incorporated; F. H. Murphy, 2525 Hemphill St.

Tex., Longview—Mullin Ulman Co., incorporated; T. J. Mullin.

Tex., Kilgore—C. A. Jones, Inc., chartered; C. A. Jones, L. H. Jones, R. M. Jones.

Tex., Rankin—City, reported, considering construction municipally owned gas system; supply from Big Lake oil field.

Tex., Tyler—Valley Oil Co., capital \$50,000, incorporated; Tom L. Beauchamp, B. Wilkin-

Ice and Cold-Storage Plants

La., Monroe—Morehouse Ice Co., Inc., 1000 Ouachita Natl. Bank Bldg., capital \$25,000, incorporated; E. Fudickar; erect refrigeration plant and warehouse.

Tex., Harlingen—Frozen Juice Corp., B. F. Pitman, reported, plans erecting quick freezing plant; capacity 3000 gal. daily.

Iron and Steel Plants

Ala., Birmingham—Ingalls Iron Works Co. acquired Hartsfield Steel Co., 2716 N. 24th St.; enlarge plant and resume operation as steel drum and container division of Birmingham Tank Co., subsidiary of Ingalls Co.; manufacture drums and bbls.

Tenn., Memphis—Vulcan Iron Works, 138 E. Butler St., reported, will rebuild burned plant.

Land Development

Fla., Daytona Beach—Badger Fruit Corp. incorporated; W. G. Doern.

Fla., Jacksonville—Omega Corp., incorporated; E. F. Pomeroy, 1852 Laura St.

Fla., Lecanto—W. J. Phinn, 7 S. Dearborn St., Chicago, Ill., reported, interested in development of 19,000 acres in Citrus County for colonization; Fred O. Schroeder, Local Agt. in Charge.

Fla., Tallahassee—Florealty, Corp., incorporated; S. C. Wood.

Ga., Augusta—Augusta National Organization Committee, Willis Irvin, S. F. C. Bldg., Archt. for clubhouse; Olmsted Brothers, Brookline, Mass., Landscape Archts., reported, soon begin work on golf course; Wendell P. Miller and Associates of New York, have contract for golf course; cost \$1,000,000; Dr. A. MacKenzie, Golf Course Archt. 7-30

La., New Orleans—Abundance Realty Corp., capital \$20,000, incorporated; Wm. C. Crals, 1340 Almonaster St.

Md., Baltimore—Braemer Forest Corp., Baltimore Trust Bldg., incorporated; Alfred Jervis, Jos. T. Van Pelt.

Mo., Cuba—Round Spring Caverns, Inc., incorporated; A. J. Barnett.

Mo., St. Louis—Dr. Ellis Fischel, Metropolitan Bldg., and associates, reported, develop 118 acres.

S. C., Beaufort—Kate Gleason, Rochester, N. Y., and Gold Eagle Tavern, Beaufort, reported, plans land development.

Tex., Port Arthur—City, reported, develop 5-acre park.

Tex., San Antonio—Thomas W. Masterson, Alamo Bank Bldg., reported, acquired and will develop tract on Olmos Drive.

Tex., San Antonio—Texas State Parks Bd., 434 Bedell Bldg., San Antonio, D. E. Colp. Chrmn., advises development of Banders Park, indefinitely postponed. 8-6

Va., Fairfax—District Realty Corp., incorporated; Ernest W. Smoot, Shoreham Bldg., Washington, D. C.

W. Va., Huntington—Harbour Realty & Investment Co., incorporated; W. B. Harbour, 414½ Sth St.

Lumber Enterprises

N. C., Greensboro—Mendenhall's, Inc., 533 S. Aslie St., capital \$100,000, chartered; Robt. E. Mendenhall.

S. C., Sumter—William Plywood Co., reported, construct \$25,000 building; brick; 1 story; day labor.

Mining

Tex., Amarillo—Panhandle Sand & Gravel Co., Amarillo Bldg., capital \$300,000, incorporated; L. D. Eastland.

Tex., Calvert—Gifford-Hill Co., Inc., North Texas Bldg., Dallas, reported, acquired plant and equipment Brazos Valley Gravel Co.; capacity 70 cars daily; completing 6-mile highway; tenant houses under construction.

Miscellaneous Construction

Ark., Helena—U. S. Engr. Office, 1006 McCall Bldg., Memphis, Tenn., opens bids Oct. 20 for approx. 125,000 cu. yd. earthwork, White River Levee Dist., Ark., Item R-307A, 307R mile below Cairo, enlargement, 1331 ft. long, 30 ft. high.

D. C., Washington—Office of Public Buildings and Public Parks of National Capital let contract to Fred Drew Co., Inc., 2539 Pennsylvania Ave., N. W., at \$90,646, for conc. cascades, walls, steps, paving, perrons, balustrades, pools, rooms, plumbing, drainage and electrical work, hillside section Meridian Hill Park. 10-8

D. C., Washington—E. H. Bennett, of Bennett, Parsons & Frost, Archts., 80 E. Jackson Blvd., Chicago, advises plans agreed upon for developing city park, 15th St. and Pennsylvania Ave., Washington, allowing Pennsylvania Ave. to continue as at present straight to Treasury Bldg.; involves space terraced and trees planted, having as its central feature decorative fountain; suggestions made to house automobiles on lower level; starting on working plans.

D. C., Washington—Following estimating on steel storage building and steel shop buildings, U. S. Engr. reservation, 11th and O St., S. E., bids due Oct. 20, U. S. Engr. Office, 1068 Navy Bldg.: A. L. Smith & Co., 2539 Pennsylvania Ave.; H. Herfurth, Jr., 1406 G St.; Bahen & Wright, 916 Rhode Island Ave.; Pringle Construction Co., 907 15th St.; W. E. Mooney, 2539 Pennsylvania Ave.; Lee T. Turner, 1366 Perry Pl., N. W.; Skinner & Garrett, 1719 I St., N. W.; Frank L. Wagner, Inc., 10 L St., S. E.; H. W. Cord Co., 1003 K St.; Chas. H. Tompkins Co., 1608 K St., N. W.; E. E. Ward & Son, 3563 11th St.; Geo. E. Wyne, 2539 Pennsylvania Ave.; C. Wohlgenuth, Jr., 1800 E. St.; Fidelity Construction Co., 1218 Randolph St., N. W.; all Washington; M. L. Broadhurst, Bethesda, Md. 10-8

Florida—U. S. Engr., Florida Theatre Bldg., 128 E. Forsyth St., Jacksonville, opens bids Nov. 5 for grain and repairing south jetty, entrance to St. Johns River.

Fla., Daytona Beach—City Comsn. authorized extension of City Island to form breakwater for yacht basin in Halifax River between mainland by utilizing spoil produced by War Dept.'s dredging operations; Gilbert A. Youngberg, Engr., 21 Laura St., Jacksonville.

Fla., Tampa—Standard Fruit Co. and City plan \$24,300 banana shed at municipal terminal.

Louisiana—Bd. of State Engrs., 207 New Orleans Court Bldg., has low bids for levees: Sample-Westdale New Levee, J. J. McKeithen, Grayson, 8.47 cents per cu. yd.; Montgomery Ferry South New Levee, John L. McWilliams, New Orleans Bank Bldg., New Orleans, 8.44 c.; all or none, both projects, J. F. Hebert, Breaux Bridge, 9.5c. 9-24

La., New Iberia—Chief of Engrs., War Dept., Washington, D. C., drawing plans for salt water guard lock in Intracoastal Canal Waterway west of Bayou Chene and west of Vermilion River for protecting rice crops.

La., New Orleans—Bd. of State Engrs., New Orleans Court Bldg., let contracts for levees: McWilliams Dredging Co., Canal Bank Bldg., at 18.5 cents per cu. yd., for Fort Jackson to Jump-Back Protection Levees, Buras Levee Dist., Plaquemine Parish; Aug. A. Buras, 3128 DeSoto St., at 33 cents per cu. yd. for Triumph Levee, Plaquemine Parish, 5000 cu. yd. 10-8

Md., Salisbury—Cemetery Committee of Salisbury Parish, F. W. C. Webb, Chmn., 215 N. Division St., has plans complete for "Stonehaven" community mausoleum; construction by Atlantic Mausoleum Co., Inc., Albert Ferrar, Pres., 1563 Vernon St., Harrisburg, Pa. 8-20

Missouri—War Dept., Washington, D. C., allotted \$190,000 for Missouri River improvements, \$170,000 for work from Kansas City to mouth and remainder from Kansas City to Sioux City.

Missouri—U. S. Engr. Office, 707 Postal Telegraph Bldg., has low bid from Ervin Bourgois, Bismarck, N. D., at \$34,919, for 300 lin. ft. standard revetment, Missouri River, Mannheim Bend.

Missouri—U. S. Engr. Office, 707 Postal Telegraph Bldg., Kansas City, opens bids Nov. 10 for constructing about 10,580 lin. ft. pile clump and batter pile dikes, Missouri River, Grand River and Bushwacker Bends, 2.5 mi. upstream from New Frankfort; also 6610 lin. ft. standard pile clump dikes, Missouri River, Straubs and Gasconade River Bends, 2.0 mi. upstream from Gasconade.

N. C., Fayetteville—City votes Nov. 17 on \$65,000 bonds for terminals on Cape Fear River.

Missouri—U. S. Engr. Office, 707 Postal Telegraph Bldg., Kansas City, opens bids Nov. 9 for 2900 lin. ft. standard revetment, Missouri River, Eureka and Marion Bends, ½ mi. upstream from Marion; for 3480 lin. ft. standard pile clump dikes, Missouri River, Wayne City Bend, 2 mi. downstream from Cement City, and 7410 lin. ft. standard

pile clump dikes, Missouri River, Gasconade River Bend and McGirks Island Reach, 2 mi. downstream from Gasconade.

S. C., Charleston—U. S. Engr. Office, Gilbert Van B. Wilkes, Maj., Corps of Engrs., Customhouse, P. O. Box 905, advises no plans made yet for repairs to north pier U. S. Engr. wharf. 10-8

Tex., Beaumont—Port Comsn., W. Scott Hammond, Port Director, has low bid from Herman Weber, Perlstein Bldg., at \$13,761, for cotton warehouse at port. 10-1

Tex., El Paso—El Paso County, E. B. McClintock, Judge, advises reservoir in McKelligon's Canyon being built by county on force account; J. W. Carter, County Engr., is engineer in charge. 8-27

Va., Cape Henry—U. S. Engr. Office, foot of Front St., Norfolk, let contract to Tunstall-Johnson Co., Inc., Citizens Bank Bldg., Norfolk, for furnishing and placing riprap stone for preventing beach erosion in front of U. S. Weather Bureau. 9-24

Miscellaneous Enterprises

Ala., Huntsville—Huntsville Daily Register, reported, will be published by Register Publishing Co., Wm. H. Pierce, Atty.

Ala., Huntsville—Henry P. Johnston, 1424 N. 32nd St., Birmingham, reported, acquired Huntsville Daily Times.

Ark., Fort Smith—City, reported, let contract to Fabric Fire Hose Co., 9 Park Place, New York, for treated fabric fire hose and to Bi-Lateral Fire Hose Co., 20 N. Wacker Drive, Chicago, Ill., for fire hose; cost about \$12,000; to American La France & Foamite Corp., 911 Erie St., Elmira, N. Y., at \$57,140 for five 750 gal. pumper and service truck.

D. C., Washington—Chas. H. Tompkins Co., 1608 K St., reported, has contract for printing plant 459 I St., for Ransdell, Inc., 1315 C St.; 2 stories; 48x141 ft.; slag roof; steam heat.

Fla., Clermont—Trimble Properties, S. H. Bowman, Gen. Mgr., (Operating Glen Falls, N. Y., as Trimble Machine Works, office and operating headquarters Clermont), own 5000 acres land, clearing 150 acres for planting tung oil trees (600 acres under cultivation), has 6 nurseries containing 200,000 trees.

Fla., Panama City—Panama City Cocoa Cola Bottling Co. incorporated; L. E. Vickery.

Fla., Sanford—Celery City Printing Co., incorporated; Wm. Haynes.

Ky., Louisville—Pioneer Publication, incorporated; B. M. Smith, 929 Goss St.

Ky., Louisville—John B. Gallagher, 45 W. 45th St., New York, reported, completed negotiations for acquiring Herald-Post Co. 9-3

Ky., Shelbyville—American Tobacco Co., 111 5th Ave., New York, negotiating for building under construction, Zaring Mill Rd., for tobacco prize room; W. T. Miller, Contr.

Md., Baltimore—Tainton Research Laboratory, Inc., of East St. Louis, Ill., reported, acquired 2-story building, 3100 Elm Ave., Hampden; remodel for laboratory.

Md., Baltimore—Baltimore Paint & Color Co. erect addition, 148 S. Calverton Rd.; 1 story, brick, 34x100 ft.; steel shed, 1 story, 25x28 ft.; Morris Zimlin, Engr., 1024 Granby St.

Md., Chevy Chase—Eldridge Farms Dairy Co., Inc., chartered; John W. Price, Union Trust Bldg.

Md., Frederick—South Mountain Hennyry, Inc., capital \$50,000, incorporated; Wm. C. Bettie.

Md., Hagerstown—Pangborn Corp., Crestview Ave., reported, deferred action on erection of extension to plant for about one month; Consolidated Eng. Co., 20 E. Franklin St., J. B. Ferguson, Hagerstown; Frairie Bros., 19 W. Franklin St., Baltimore, estimating; bids in (mfrs. of sand blast and dust equipment). 9-24

Miss., Biloxi—Ness Creameries, reported, erect building Caillavet & W. Howard Aves.; Clifton Cox, Mgr.

Miss., Biloxi—Blue Ribbon Creameries, Jackson, R. T. Beottier, controlling Ness Creameries, receives bids Oct. 20 for brick ice cream and cream plant Caillavet & W. Howard Sts.

Miss., Gulfport—American Tung Oil Products Corp., T. H. Hawkes, Chicago, Ill., and Second Floor, Hotel Markham, interested in tung oil development in Pearl River county and elsewhere in South Mississippi; has 2,000,000 trees at Carriere; will transfer nursery stock to area of about 10,000 acres in S. Mississippi.

Miss., Gulfport—Arcadia Creamery, capital \$20,000, incorporated; J. H. Bowden.

Miss., West Point—Swift & Co., Chicago, Ill., reported, soon begin work on second unit of poultry experiment farm, consisting of hatcheries; sheet iron. 8-27

Mo., Sikeston—Sikeston Coca-Cola Bottling Co., incorporated; Milburn Arbaugh.

Mo., St. Louis—Kauffman Industries, Inc., reported, leased plant, 5147 Brown Ave.; manufacture radiators and air conditioning systems.

Mo., St. Louis—Rudin Pattern Co., Central Natl. Bank Bldg., capital \$20,000, incorporated; Henry Rudin.

Mo., St. Joseph—Walker Sales Corp., capital \$25,000, incorporated; W. F. Kirkpatrick, 802 N. 25th St.; manufacture heating appliances.

Mo., St. Louis—Falstaff Corp., 3662 Forest Park, erect addition to food products plant; 1 and 2 stories; 69x119 ft.; \$15,000.

Mo., St. Louis—McDonald Machinery Co., capital \$50,000, incorporated; Robt. P. McDonald, 4068 Conn St.

Mo., St. Louis—Kroger Grocery & Baking Co., Albert H. Morrill, reported, plans establishing bread and cake bakery and garage at 1311 S. 9th St.

N. C., Wilmington—Stellings Co., E. G. Stellings, Pres., North Carolina Bank & Trust Bldg., advertising, reported, consolidated with Advertising, Inc., Central Natl. Bank Bldg., Richmond, Va.

S. C., Walterboro—Walterboro Coca-Cola Co., incorporated; T. J. McDaniel.

Mo., Windsor—International Shoe Co., W. H. Moulton, Pres., 1501 Washington Ave., St. Louis, reported, soon begin work on \$80,000 shoe plant. 8-27

N. C., Greensboro—Southeastern Theatres, Inc., capital \$50,000, chartered; L. F. Barnard, 746 Percy St.

N. C., High Point—Industrial Lithographing Co., 1449 3th St., Brooklyn, N. Y., reported, establish warehouse for distribution of products to hosiery and textile mills in southwest; Harvey Mills, Griffin, Ga., in charge.

N. C., Winston-Salem—Brame Chemical Co., Stockton Bldg., reported, reorganized with Leo S. Disher, V. P. & Gen. Mgr.; manufacturing to be continued at Asheboro; executive offices Winston-Salem.

South Carolina—Meade Johnson Co., Evansville, Ind., Lawrence B. Hoyt, Rep., considering establishing plant producing infant diet materials, using South Carolina iodine vegetables; sites in Columbia and vicinity under consideration.

Tenn., Knoxville—Knoxville Publishing Co., incorporated; Nat Taylor, Johnson City; establish daily newspaper.

Tenn., Walland—Schlosser Leather Co., reported, rebuild burned plant; J. F. Shields, Supt. 5-7

Tex., Anson—Kraft-Phenix Cheese Corp., 400 Rush St., Chicago, Ill., and Denison, reported, plans establishing cheese plant; A. J. Riddle, Denison, in charge.

Tex., Big City—Gulf Coast Water Co. (irrigation) incorporated; E. J. Groffott.

Tex., Houston—Simplex Mfg. Co., incorporated; Ashley N. Denton, 606 Sul Ross St.

Tex., San Antonio—S. E. Knowlton, Knowlton Creamery, 1415 W. Summit Ave., reported, acquired site Fredericksburg Rd., construct \$50,000 creamery; install modern equipment.

Va., Martinsville—Flashlight Corp. of Virginia, C. B. Collins, Pres., Washington, D. C., executive office New York, manufacturing plant Freehold, N. J., reported, started excavation for batteryless flashlight plant near Fielddale, Henry County; 50x200 ft.; steel; brick walls and rein. conc.; E shaped; first unit to be completed in 60 days; develop Collinsville community center; employees' dwellings and business structures contemplated by company; Eubank & Caldwell, Inc., Boxley Bldg., Roanoke, Archts., will supervise construction; H. H. Dudley, in charge of construction. 9-3

W. Va., Charleston—Interstate Monument Co., incorporated; Dale D. Thomas, Capitol City Bank Bldg.

Motor Bus Lines and Terminals

Fla., St. Petersburg—Florida Motor Lines, 31 W. Central Ave., Orlando, T. B. O'Steen, Traffic Mgr., let contract to John H. Bull Construction Co., Inc., Equitable Bldg., St. Petersburg, for erection bus station, 108 Central Ave.; 49x100 ft., 1 story, conc. and steel, conc. and tile floors; Hadley & Nordstrom, Archts., 356 Central Ave.; all equipment needed will be purchased locally. 9-24

Md., Baltimore—Cathedral Taxi Co., Inc., 1017 S. Clinton St., incorporated; C. Ride-nour.

Mo., St. Louis—Purple Swan Lines, Inc., 2512 Page St., capital \$15,000, chartered; Jack Goldstein.

Tenn., Memphis—C. O. Hay, Hay Trucking Co., 103 S. Second St., granted permission by Arkansas Railroad Comsn., Little Rock, Ark., for motor freight lines over Highway No. 70, Memphis to Widener, Madison, Forrest City and Palestine.

Va., Roanoke—Roanoke Railway & Electric Co. will have hearing Nov. 22 before State Corp. Comsn., Richmond, on application to operate bus line Roanoke and Washington Heights.

W. Va., Charleston—West Virginia Transportation Co., 117 N. Fourth St., Clarksburg, will have hearing Oct. 15 before F. O. Sanders, Supv. of Transportation, State Rd. Comsn., to operate bus line between Berkeley Springs and Maryland state line at Hancock.

Railways

Fla., Monticello—Atlantic Coast Line R. R., J. E. Willoughby, Ch. Engr., Wilmington, N. C., rebuild 4 mi. track and resume service between Monticello and Yuste.

Md., Baltimore—Pennsylvania R. R. Tunnels—See Miscellaneous Construction.

Md., Baltimore—Consolidated Gas Electric Light & Power Co., Baltimore, consummated 20-yr. contract for power with Pennsylvania R. R. covering entire electrification requirements of system from Susquehanna River, Havre de Grace, Md., to Washington, D. C.; power to be furnished early in 1933 and will come from hydro-electric plant under construction at Safe Harbor, Pa. 10-8

Mo., Kansas City—Kansas City Terminal Ry. Co., J. V. Hanna, Ch. Engr., advises plans for \$700,000 double track line to be built in city still in preparatory state; no work ready to submit to contractors for proposals; main features of project agreed on between terminal company, city, and other railroads whose property is affected, but details have not been perfected; Norton Bros. 230 Rwy. Exch. Bldg., have contract for small portion of grading which does not conflict with other features of work. 8-20

Mo., Kansas City—Chicago Great Western R. R. Co., B. E. Sunny, Ch. of Bd., 212 W. Washington St., Chicago, Ill., acquired 20% interest in Kansas City Southern Ry. Co., C. E. Johnston, Pres., Kansas City, Mo.

Mo., St. Louis—St. Louis Southwestern Ry. Co., D. Upthegrove, Pres., St. Louis, applied to Interstate Commerce Comsn., Washington, for permission to merge with Southern Pacific Co., P. Shoup, Pres., San Francisco, Calif. 10-1

Mo., St. Louis—St. Louis-San Francisco Ry., B. T. Wood, V.-Pres. and Ch. Officer, inquiring for 5 freight car underframes.

Mo., St. Louis—Missouri-Kansas-Texas Lines, M. H. Cahill, Pres., ordered 2 gas-electric motor cars, to be constructed by St. Louis Car Co., 8000 N. Broadway, at approx. \$60,000; for use on Texas Central branch; 400 h. p., electricity to be generated by gasoline engines, 78 ft. long, 15-ft. mail compartment and 46-ft. express and baggage compartment.

Tenn., Chattanooga—Tennessee, Alabama & Georgia Ry., H. F. Bohr, V.-Pres. in Charge of Operation, advises will complete laying, ballasting and surfacing 6 mi. 85-lb. rail during October and that possibly additional mileage will be authorized for November. 9-10

Texas—Atchison, Topeka & Santa Fe Ry., M. J. Collins, Gen. Pur. Agt., Chicago, Ill., reported, may purchase 60,000 tons rails within few weeks.

Va., Richmond—Chesapeake & Ohio Ry. Co., H. C. Pearce, Dir. Pur. and Stores, Cleveland, Ohio, inquiring for 1200 tons fabricated steel for freight car repairs.

Roads, Streets and Paving

In connection with LAND DEVELOPMENT large sums are expended for roads, streets, paving and sidewalks. Details will be found under that classification.

Proposed Construction

Alabama—State Highway Comsn., L. G. Smith, Director, Montgomery, drawing plans for improving western section Bankhead Highway between Birmingham and Anniston.

Ga., Atlanta—Fulton County Commrs. approved plans for extending W. Harvard road, College Park, to Newnan Highway.

La., Baton Rouge—State Highway Comsn., O. K. Allen, Chmn., opens bids Oct. 27 for washed and screened gravel 40% sandy-clay gravel reef shell, clam shell, crushed limestone, slag and sand for maintenance during November.

La., Lafayette—City, Bd. of Trustees, has low bid from Barber Bros. Construction Co., Baton Rouge, for conc. contracts No. 1 and 2; from T. L. James & Co., Ruston, on black top contract No. 2. 10-1

MARYLAND—State Roads Comsn., L. H. Steuart, Sec., Baltimore, opens bids Oct. 20 for 8 roads in following counties:

Harford—2.15 mi. conc., Federal Hill-Bush Corner road, end H-80 to Bush Corner, and 0.53 mi. conc., Federal Hill-Bush Corner road toward Harkins, H-122-44; 0.8 mi. macad. resurface and 1.97 mi. gravel, Perryman to Bush River, H-139-42;

Montgomery—1.0 mi. macad., Old Germantown toward Boyds, M-186-52; 1.0 mi. macad., Avenue toward White Oak, M-173-34;

Prince George's—conc. shoulders, combination curb and gutter, Baltimore-Washington Blvd. in front University of Md., P-195-311; conc. shoulders, combination curb and gutter, south side Main St., Upper Marlboro, P-196-811;

Worcester—720 ft. conc. shoulders, Market St., Pocomoke, between Second and Fourth St., Wo-106-111;

MARYLAND—State Roads Comsn., L. H. Steuart, Sec., Baltimore, has low bids for 5 roads in following counties:

Allegany—0.88 mi. conc., Front St., Baltimore Ave. toward Franklin St., for east approach to Cumberland grade elimination, A-104-63, Cumberland Contracting Co., Cumberland, \$69,155;

Baltimore—1.21 mi. conc., Belfast road, Butler toward Belfast, B-217-42, Development & Construction Co., Baltimore, \$27,656;

Montgomery—1.55 mi. macad., Damascus-Latonsville road to Howard Chapel and toward Patuxent River, M-182-52, H. E. Gosnell & Co., Frederick, \$21,382;

Prince George's—1.46 mi. conc. shoulders, Livingston road, D. C. line to Hunt's Corner, P-192-811, Corson & Gruman Co., Washington, D. C., \$14,291;

Somerset—1.5 mi. conc., Princess Anne-West Post Office road, end S-31 toward West Post Office, S-46-12, Hannaman Burroughs Co., Salisbury, \$21,631. 10-1

Md., Baltimore—City, Bd. of Awards, Office of City Register, City Hall, opens bids Oct. 21 for Cement Conc. Contr. 605, 800 sq. yd., \$15,000; George Cobb, Highways Engr.

Mo., Independence—Jackson County Court received plans from engineers for highways to cost \$800,000 with recommendation that bids be asked for Oct. 27; preliminary work to be done this fall and actual construction in early spring; contracts to be let in October include: 7.9 mi. U. S. 50, south from Independence on Noland St.; 9.2 mi. extending Raytown road, intersection U. S. 50 south to Outer Belt; 79th St., state line to Wornall road, and Wark Pkwy. will be extended from city limits south to 79th St.; 3.8 mi. cut-off, Blue Ridge Extension to Leeds road; 1.2 mi. cut-off, Blue Ridge cut-off to Sni-Bar road; Blue Springs road to be finished through Blue Springs, R. D. Mize road to U. S. 40; all 18-ft. conc.

Oklahoma—State Highway Comsn. Sam R. Hawks, Chmn., Oklahoma City, has apparent low bid from Union Construction Co., Oklahoma City, at \$25,369, for 1.5 mi. conc. slab surfacing, U. S. 62. 10-1

Okla., Fort Sill—Constructing Quartermaster has low bid from Standard Paving Co., 2110 E. 11th St., Tulsa, at \$113,812, for 4.7 mi. grading, draining, Highways 62 and 227. 10-1

SOUTH CAROLINA—State Highway Comsn., Ben M. Sawyer, Ch. Highway Commr., Columbia, has low bids for 7 road and 7 bridge projects in following counties:

Florence—1.243 mi. surfacing with sand clay, U. S. 76, J. E. Lunn, Timmons ville, \$3465;

York—15.852 mi. surfacing with topsoil, State Route 163, Sutton Bros., Inc., Stahlman Bldg., Nashville, Tenn., \$58,595;

Greenwood—McCormick—0.22 mi. paving bridge approach, Route 24, .028 mi. bridge approaches, U. S. 25 and .011 mi. bridge approach, Route 43, C. Y. Thomason, Greenwood, \$2704;

Abbeville—924 mi. topsoil surfacing, Route 18, C. M. McKenzie, Abbeville, \$3294;

Lee—0.3 mi. conc. paving, State Route 30, bridge approaches, Boyle Road & Bridge Co., Sumter, \$3040;

Chesterfield—398 mi. conc. paving bridge approach, U. S. 1, Carolina Contracting Co., 1112½ Taylor St., Columbia, \$10,226;

Spartanburg—.01 mi. conc. paving bridge approach, Route 10, Wannamager & Wells, Orangeburg, S. C., \$892; 165-ft. rein. conc.

bridge and 87-ft. widened arch bridge, U. S. 176, C. D. Fulmer, Leesville, \$14,423;

Alken—100-ft. I-beam bridge, Route 394, Hobbs-Peabody Construction Co., Builders Bldg., Charlotte, N. C., \$3291; 2 treated timber, rein. conc. struc. steel bridges, State Route 4, Goodwyn & Hurt, Montgomery, Ala., \$22,421;

Anderson—175-ft. rein. conc. bridge, State Route 29, W. J. Tidwell, Jr., Great Falls, \$9476;

Darlington—400-ft. rein. conc. bridge, U. S. 601, Alt. 1, J. S. Bowers, Whiteville, N. C., \$20,176; Alt. 2, Kiker & Yount, Reidsville, N. C., \$19,537;

S. C., Greenville—Greenville County, Jack Wier, County Engr., Courthouse, Masonic Bldg., opens bids Oct. 28 for 6.21 mi. bitum. surface treatment and top soil on 8 roads.

TENNESSEE—State Dept. of Highways & Public Works, R. H. Baker, Commr., Nashville, has low bids for 2 roads in following counties:

Davidson—3.95 mi. conc., Proj. F-255-A, Foster & Creighton, Fourth and First Bldg., Nashville, \$71,026;

Lauderdale—3.97 mi. conc., F-257, project withdrawn;

Williamson—7.15 mi. asphalt top-conc. base, F-256, Wm. F. Bowe, Jr., 540 Reynolds St., Augusta, Ga., \$150,381 9-24 and 10-8

TENNESSEE—State Dept. of Highways & Public Works, Robert H. Baker, Commr., Nashville, opens bids Oct. 30 for 6 roads and 10 bridges, costing approx. \$925,000, in following counties:

Lincoln-Franklin—10 bridges and approaches, State Route 15, between Fayetteville and Winchester;

Van Buren—5.6 mi. grading, draining, Route 30, letting conditional on whether county provides rights-of-way;

Henry—5.2 mi. paving, Route 54;

Robertson—4.2 mi. paving, Route 11;

Wilson—6.3 mi. paving, Route 24;

Polk—paving Route 39.

TEXAS—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, plans 8 roads in following counties:

El Paso—widening Highway 1, point near Ysleta to El Paso, \$120,000;

Caldwell—graveling and double bitum. surface treatment, Highway 80, \$2750;

Cherokee—7.10 mi. gravel base and road oil treatment, Highway 43, Jacksonville east, M-10-Z-5, \$30,000;

Clay—widening Highway 50, M-3-Y, \$27,000;

Erath—revising grade, relocating section on improper alignment, rebuilding drainage structures and surfacing, 22 ft., 8-in. standard gravel course, Highway 10, west end pavement, Stephenville east, M-2-R-3, \$46,700;

Hardin—9.109 mi. oil mix surface treatment, Highway 8, Silsbe south, \$11,300;

Harrison—5.20 mi. widening roadway, small drainage structures, revising grade line, redecking Cypress Creek bridge, M-10-A-4, \$16,900;

Lee—graveling and double bitum. surface treatment, Highway 20, Bastrop County line to 3 mi. west of Giddings, M-14-U-4, \$34,800.

TEXAS—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, opens bids Oct. 19 or 20 for 26 roads in following counties:

Andrews—17.742 mi. grading, draining, caliche base, Highway 137, Ector County line to Andrews, SAP 936-C, Unit 1;

Bell—9.937 mi. grading, draining, rein. paving, Highway 53, Temple to Zabeckville, SAP 268-Reop., Unit 2;

Brown—14.709 mi. caliche and waterbound broken stone macad. base with triple asph. surface treatment, Highway 129, end SAP 896-A north to Eastland County line, SAP 896-B, Unit 2;

Cherokee—6.651 mi. grading, draining, Highway 22, Neches River to .5 mi. east Maydelle, SAP 251-A, Unit 1;

Childress—7.754 mi. grading, draining, Highway 4, end SAP 854-A north to intersection with Highway 5, Childress, SAP 854-G, Unit 1;

Culberson—13.014 mi. crushed gravel base, Highway 1, Van Horn east, FAP 558-D, Unit 2;

DeWitt—5.759 mi. crushed gravel base, Highway 72, intersection with Highway 81 to Yorktown precinct line, SAP 735-A, Unit 2;

Fisher—13.746 mi. gravel base, Highway 83, Roby to Jones County line, SAP 917-A, B & D, Unit 2;

Hansford—18.881 mi. waterbound caliche base, Highway 117, Hutchinson County line to Ochiltree County line, SAP 925-C, Unit 2;

Haskell—9.971 mi. grading, draining, Highway 51, intersection with Highway 18 to Rule, SAP 959-D, Unit 1;

Jones—3.471 mi. grading, draining, Highway 4, Hamilton northeast to Fisher County line, SAP 855-C, Unit 1;

Karnes—9.879 mi. caliche and crusher run

broken stone base course, Highway 112, Karnes City to Electo Creek, SAP 789-A & D, Unit 2;

Pecos—11.612 mi. caliche base and surface courses, Highway 3, Brewster County line to Terrell County line, FAP 504, Unit 2;

Reagan—11.866 mi. grading, draining, Highway 99, Big Lake to Irion County line, SAP 904-B, Unit 1;

Stonewall—13.592 mi. grading, draining, Highway 4, Fisher County line to Aspermont, SAP 855-E, Unit 1;

Tarrant—1.93 mi. grading, draining, rein. conc. paving with gravel shoulders, Highway 10, Fort Worth city limits to junction with Highway 121, SAP 977-B;

Upton—6.451 mi. grading, draining, caliche base, Highway 137, Crane County line to McCamey, SAP 909-C;

Waller—8.240 mi. rein. conc. paving, Highway 6, Grimes County line to 1 mi. north Hempstead, FAP 471-A, Sec. 1 & 2, Units 2;

Wheeler—12.988 mi. grading, draining, Highway 4, Wheeler to Hemphill County line, FAP 45, Reop., Sec. A, Unit 1;

Williamson—14.38 mi. grading, draining, Highway 2-B, Sta. 115 plus 00 west of Taylor to Taylor, SAP 231, Reop., Unit 1;

Parker—18.722 mi. crushed conglomerate base, Highway 34, Tarrant County line to Wise County line, SAP 889-F, Unit 2;

Fisher—2.008 mi. grading, draining, Highway 4, Jones County line to Stonewall County line, SAP 855-D, Unit 1;

Brazoria—5.5 mi. grading, draining, Brazoria to Clemens state prison farm, Highway 36; 3.1 mi. conc., east Jones Creek to Freeport, Highway 36; 5.9 mi. grading, draining, Clemens state prison farm to Jones Creek, Highway 36.

TEXAS—State Highway Comsn., Gibb Gilchrist, Highway Engr., Austin, plans 7 roads, including 2 bridges, in following counties:

Nueces—constructing Highways 9 and 128 through county, including bridge over Nueces River, county to furnish \$270,000, state balance;

Jackson—11.163 mi. grading, draining, creosoted timber pile trestle bridge over Carancahua Bay, SAP 969-B & C, Highway 57, Calhoun County line to Matagorda County line, \$183,600;

Panola—9.20 mi. iron ore gravel base 20 ft. wide, 9 in. loose, with double bitum. surface treatment, Highway 149, Beckville to Carthage, M-10-C-6, \$51,200;

Hudspeth—additional culverts and enlarging present culverts, Highway 1, vicinity Allamore between Sta. 1 plus 00 to Sta. 182 plus 66, FAP 558-A, Unit 2, \$13,000;

Harris—4.50 mi. adding 4-in. additional shell for base and constructing asphalt surface treatment, San Jacinto Battle Grounds drives, M-12-J-4, \$20,800;

Callahan—14.30 mi. widening shoulders and ditches, lengthening culverts, Highway 1, west city limits Baird to Callahan-Taylor County line, M-8-V-3, \$44,800;

Calhoun—7.323 mi. grading, draining, Highway 57, Jackson County line to Port Lavaca, SAP 969-A and SAP 807-E, Units 1, \$33,300.

Tex., Galveston—City Commrs. have low bids from J. W. Zempeter, 1813 24th St., and H. J. Hetkes, Guaranty Bldg., each at \$12,000, for resurfacing 29th, F and 37th Sts.; tentatively let contract to A. Matall & Son, 1727 I St., for paving O St. 9-17

VIRGINIA—State Dept. of Highways, C. S. Mullen, Ch. Engr., Richmond, has low bids for road and bridge in following counties:

Chesterfield—widening bridge over Old Town Creek, U. S. 1, Perkins-Barnes Construction Co., Blackstone, \$1546;

Page—5.4 mi., Route 815, Blount & Hay-an, Brodnax, gravel, \$28,305; T. W. Co-mann, Norton, macad., \$58,966;

Franklin—4.7 mi. soil, Route 20, withdrawn from letting.

Contracts Awarded

Fla., Orlando—Orange County let contract to A. R. Merrill Construction Co. for 12,500 cu. yd. limerock for half of Winter Garden-Vineland road.

La., Bastrop—Morehouse Parish Police Jury, J. Lester White, Parish Engr., let contract to Alexandria Contracting Co., 907 4th St., for 4 mi. Hughes Chapel Highway. 9-17

La., Shreveport—City, H. E. Barnes, City Engr., let contract to Flenniken Construction Co., American Bk. Bldg., for rein. conc. paving Douglas St., at \$8791; to R. O. Marks, 3408 La Poloma St., at \$10,820, for Milam St. 10-1

Mo., St. Louis—City, Bd. of Public Works, City Hall, let contracts totaling \$47,593, to following firms: Eyeremann Contracting Co., 210 S. Grand Blvd.; Creech Construction Co., 4150 Bingham Ave.; Skrainka Construction Co., Security Bldg.; W. A. Riley Construction

Co., 6221 Olive Blvd.; Stiers Bros. Construction Co., 2944 Magazine St., and Hogan Contracting Co., 2915 Allen Ave.

Tenn., Nashville—State Dept. of Highways & Public Works, R. W. Baker, Commr., improve about 377 mi. highway, practically all to be done by state maintenance forces; include 40 projects in 32 counties; where there is graded road without all-weather surface roadway will be graveled and where there is already all-weather road and where traffic is sufficient to justify expenditure, oil will be supplied.

Tex., Fort Worth—Tarrant County, W. E. Yancey, County Aud., let contract to West Texas Construction Co., 501 E. Rosedale St., at \$10,240, for bitum. conc. topping, Death's Crossing, through Arlington; Wesley Stevens, County Engr.

Tex., Waco—McLennan County let contract to W. McKethan, at \$44,250, for 8-in. gravel surfacing 48 mi.

Va., Norfolk—City, Dept. of Public Works, let contract to F. J. McGuire Co., 39th St., for paving streets from which street car tracks are being removed. 8-27

Va., Richmond—State Dept. of Highways, C. S. Mullen, Ch. Engr., improve Hermitage road, city limits at Bellevue Ave. to end of state maintenance with state forces.

Sewer Construction

Sewer construction in LAND DEVELOPMENT projects involves the expenditure of large sums of money. Under that classification details of these improvements are reported.

D. C., Washington—Pater D'Adamo Construction Co., Marine Bank Bldg., Baltimore, Md., reported, has contract for North Spring Valley sanitary sewer Fordham Rd.; Warren F. Brenizer Co., 1501 S. Capitol St., for Ivy City service sewer. 10-1

Ky., Louisville—See Want Section—Bids Asked.

Md., Baltimore—Aiello Constn. Co., Gough and Dean Sts., reported, has contract at \$58,190, for sewers, Sanitary Contr. 269. 9-10

Md., Parkville—Baltimore—Baltimore County Commrs., John B. Haut, Ch. Clk., Court House, Towson, will have plans ready for bids about Jan. 1 for sewers; Saml. A. Green, Engr., Towson.

Okla., Oklahoma City—City, reported, started preliminary construction work on Rock Island park land sanitary sewer, under supervision City Engr. Dept.

Okla., Tulsa—Road & Wood and C. M. Brown, 1315 Trenton St., reported, have contract for North Hartford Ave. storm line.

S. C., Greenville—J. Wilbur Hicks, Chmn., Chamber of Commerce, Special Div., receives bids Nov. 3 for \$510,000 sewer construction in Parker Dist. and Northgate; Parker Dist. plans issuing \$425,000 bonds and Northgate \$85,000 bonds. 8-13

Tex., Beaumont—City, reported, construct sewer on Concord Rd.; cost \$18,000.

Tex., Dallas—City, John N. Eddy, City Mgr., about ready to ask for bids on \$1,500,000 storm sewers all parts of city; W. W. Horner, Const. Engr.; O. H. Koch, Dir. of Public Works. 10-8

Tex., Houston—Russ Mitchell, Inc., Petroleum Bldg., reported, low bidder at \$50,402, for drainage system vicinity Montrose Elementary School, and at \$50,402, for storm and sanitary sewers N. Main St.; B. P. Panas, Esperson Bldg., for storm and sanitary sewers on Dunlavy; H. A. Forrest Co., for sanitary sewers from Melnar to Smith St.; Harrison-Wright Co., 4 W. Third St., Charlotte, N. C., for sanitary sewers vicinity Eberhardt and W. McKinney Ave. 10-1

Tex., Mineola—City, J. Russell, Mayor, reported, let contract to Panhandle Construction Co., Lubbock, for sanitary sewer improvements.

Va., Langley Field—See Want Section—Bids Asked.

Telephone Systems

Ala., Montgomery—Voice of Montgomery, Commerce & Bibb Sts., applied to Federal Radio Comsn. for permission to erect new station.

Mo., Springfield—Public Park Bd. obtained option on 10 acres near airport to be leased to government for \$60,000 airways radio station; P. E. White, Rep. Dept. of Commerce. 10-8

N. C., Fayetteville—Carolina Telephone Co., applied for new franchise; plans placing wires underground in business section.

Tex., Elgin—Southwest Telephone Co., reported, reconstruct entire system and exchanges; build office.

Textile

Ky., Nicholasville—Fred E. Baskett, G. V. Morris and associates, reported, interested in establishment of rayon plant.

N. C., Marion—Marion Knitting Mill, reported, installing 21 knitting machines.

Tenn., Shelbyville—Woolsey Knitting Mills, constructing, local labor, full fashioned silk hosiery mill; 125x125 ft.; brick; cost \$25,000. 10-8

Va., Norfolk—H. D. Edson, 1214 Stockley Gardens St., Robt. Throckmorton, reported, interested in organizing company to take over and operate Elizabeth Knitting Mill plant, S. Norfolk; 5000 spindles.

Water Works

Details of water works improvements in connection with the many LAND DEVELOPMENT operations will be found under that Classification.

Fla., Lake City—Construction Service, Veterans Administration, Washington, receives bids Oct. 27 for water supply system, Veterans' Hospital. Following estimating: McClelland Co., 122 Brevard Court, Charlotte, N. C.; Wm. W. Durnall, Inc., Marble Arcade, Lakeland; American Water Softener Co., Lehigh Ave., Pittsburgh, Pa.; Chicago Bridge & Iron Works, 1616 Walnut St., Philadelphia (tank); C. M. Guest & Sons, Anderson, S. C.; Permutit Co., 440 4th Ave., New York; Louis Gertner, Jr., 8233 Harper Ave., Chicago, Ill.; Batson-Cooks Co., West Point, Ga.; Lakeside Engineering Corp., 176 W. Adams St., Chicago; W. E. Caldwell Co., 200 E. Brandels St., Louisville, Ky.; W. C. Spratt, Fredericksburg, Va.; Virginia Machinery & Well Co., 1319 E. Main St., Richmond, Va.; Graver Tank & Mfg. Co., East Chicago, Ind.; Williams Construction Co., Red Rock Bldg., Atlanta, Ga.; Pittsburgh-Des Moines Steel Co., Neville Island, Pittsburgh, Pa. 10-8

Ky., Versailles—City, reported, considering bond election for increased water supply; construct water line from Kentucky River.

La., Jeanerette—City, reported, approved plans of J. B. McCrary Co., Atlanta, Ga., for water works project.

La., New Orleans—National Cast Iron Pipe Co., Birmingham, Ala., reported, low bidders for furnishing 4-in. c. i. pipe and miscellaneous fittings. 9-3

Md., Cumberland—See Want Section—Bids Asked.

Miss., Ellisville—Layne-Central Co., 212 Millsaps Bldg., Jackson, reported, has contract for water well for town. 9-24

Mo., Cape Girardeau—Missouri Utilities Co., reported, proposes erecting 1,750,000 gal. enclosed reservoir at site of present one on N. Henderson Ave. near Teachers College; base of conc. with steel walls 39 ft. high, 74 ft. in diam.; cost \$15,000. 5-7

N. C., High Point—McClelland Co., 9 W. 3rd St., Charlotte, reported, low bidder for water works improvements; Wm. C. Olsen, Inc., Const. Engr., 5 Exchange Place, Raleigh.

Tenn., Nashville—City, Hilary E. Howse, Mayor, let contract at \$119,323, to W. L. Hailley & Co., Nashville, for complete installation 14,000,000 gal. daily addition to filter plant; The J. N. Chester Engineers, Clarks Bldg., Pittsburgh, Pa. 9-24

Tex., Corpus Christi—See Want Section—Bids Asked. 10-8

Va., Langley Field—See Want Section—Bids Asked.

Va., Richmond—Common Council, reported, approved purchase of Williams Island for present use of city in diverting water into settling basin and for future needs in sewage disposal.

FIRE DAMAGE

Ala., Mobile—Bay Bridge Hotel at west end Mobile Bay Bridge, Karl Knodel, Prop.

Ark., Booneville—Planing mill owned by Mark Yocum.

Ark., Hoxie—Hotel Noble, owned by Mrs. A. B. Gibson, Hoxie; operated by Noble Hotel Co., Blytheville and Jonesboro; loss \$80,000.

Ark., Mount Ida—Ouachita Bldg., owned by G. S. Bearce; Robbins Bldg., Dr. J. D. Robbins, owner; Outler Bldg.; total loss \$50,000.

Ark., Pine Bluff—E. A. Howell's residence, Tamp Pike.

Fla., Indian River City—Hotel Pines; address The Manager.

Ga., Calhoun—Cotton gin owned by Paul Hunt; loss \$15,000.

Ga., Soperton—Estroff Cotton Warehouse; loss \$25,000.

Ky., Bandana—Tobacco barn owned by J. J. Abernathy and Smith Gibson; barn of H. H. Grief, Ingleside.

Ky., Lexington—Grandstand at Kentucky Trotting Horse Breeders' Assn. track; loss \$80,000.

La., Belcher—John R. Stephens' residence; loss \$6000.

La., Jennings—Lake Arthur Hotel; loss \$10,000; O. G. Marquart, Owner, W. H. Freshman, Operator.

La., Saline—Evans Cash Store; Enloe's meat market and cafe; Saline Ice House; Dr. Halsy's office; O. W. Lewis' filling station; loss \$10,000.

Md., Crisfield—S. P. Mason's residence.

Md., Ellicott City—J. Natwick's barn near Ellicott City; loss \$20,000, including contents.

Md., Salisbury—Wm. M. Martin's residence, Powell Ave., Camden.

Miss., Hazlehurst—Hill Chevrolet Co's building; loss \$30,000.

Miss., Scooba—Athletic bldg., East Mississippi Junior College.

Miss., Utica—M. D. Bragg's residence near Utica.

Mo., Kansas City—Nilson Bros. Planing & Cabinet Factory, 4215 Michigan Ave.; loss \$50,000.

Mo., Kansas City—Unoccupied dwelling,

1515 Houston Ave., owned by Leo Levy,

N. C., Greensboro—Warehouse of J. E. Latham Co., Forbis & Sycamore Sts.; loss \$40,000, building leased to Greensboro Warehouse & Storage Co.

N. C., Southport—Southport Coal & Ice Co.'s plant; loss \$20,000.

N. C., Wendell—W. A. Oakley's residence near Wendell.

Okla., Ada—Cotton oil mill owned by Choctaw Cotton Oil Co.; loss \$75,000.

Tenn., Cedar Hill—John C. Clark's department store bldg. loss \$10,000.

Tenn., Memphis—Vulcan Iron Works, 138 E. Butler St.; loss \$60,000.

Tenn., Rockwood—Methodist Episcopal Church, South; loss \$15,000.

Tex., Benarold—Baker Gin; loss \$20,000.

Tex., Crandall—Farmer Gin Plant, owned by East Texas Cotton Oil Co.; loss \$25,000.

Tex., Dallas—Van Cleave Airplane Works, building owned by Martin Weiss, 1226 N. Bishop St.; loss \$25,000.

Tex., Eagle Lake—Dwelling, Bunge Ranch, Skull Creek, occupied by A. Hobbs.

Tex., Fentress—Alfred Wilkie's 4-stand gin.

Tex., Montalba—Ed Roland's cotton gin.

Tex., Oenaville—Cotton gin owned by W. C. Collier, Troy, and operated by R. F. Reeves.

Tex., Violet—Gin owned by Jerome Jauluka; loss \$50,000.

Va., Martinsville—Residence on Horse-shoe Stock Farm near Martinsville, owned by Ike De Hart; occupied by Andrew M. Stanley and H. M. Taylor.

Va., Wytheville—Commercial Printery, Main St.

W. Va., Hensley—Clubhouse owned by Fordson Coal Co.

BUILDING NEWS

BUILDINGS PROPOSED

Bank and Office

D. C., Washington—Epple & Kahr, Archts.-Engrs., 15 Washington St., Newark, N. J., reported, revising preliminary plans for \$3,000,000 office bldg.; brick and steel.

Churches

La., Raceland—Roman Catholic Church, Rev. Father Nies, Pastor, opens bids Oct. 21 for alterations and additions; conc. foundations, common brick walls, copper sheet metal work, asbestos roofing, painting, glazing, hardware, plastering, etc.; Emile Well, Inc., Archt., Whitney Bk. Bldg., New Orleans. Following contractors invited to estimate: Sidney Toups, Richard Webre, both Thibodaux; Gervais F. Favrot, Balter Bldg.; Lionel F. Favret, La. Bldg.; J. A. Haase, Jr., 916 Union St., all New Orleans.

Md., Baltimore—Land Developing Corp., 14 E. Lexington St., having plans drawn by Bernard F. Owens, 20 E. Lexington St., for 1-story stone chapel. 9-3

Md., Dundalk, Baltimore—First Baptist Church, Rev. Cecil McG. Perry, Pastor, Bloomingdale Apts., Catonsville, plans \$10,000 frame bldg.; conc. block foundation.

N. C., Durham—Cedar Fork Baptist Church, Claude Stone, member, Bldg. Comm., has plans for bldg. to replace burned structure; probably start work in few weeks.

N. C., Winston-Salem—First Presbyterian church, S. Clay Williams, Chmn., Bldg. Comm., selected Northup & O'Brien, Starbuck Bldg., Winston-Salem, as architects, Dr. Chas. Z. Klauder, 1429 Walnut St., Philadelphia, as const. archt., and Wiley & Wilson, Peoples Natl. Bk. Bldg., Lynchburg, Va., as heating-ventilating engr. for \$150,000 Sunday school addition.

Tex., Boerne—St. John's E. L. Church, Prof. C. C. Roeder, Sec. Bldg. Comm., erect natural stone bldg.; bids Oct. 21 by invitation; 22x48 ft., conc. foundation, galv. standing-seam roof, wood roof trusses; Marvin Eickenroht, Archt., 610 Maverick Bldg., San Antonio.

Tex., Longview—Church of Christ has permit for \$12,000 bldg., Second and North Sts.; brick and tile, 1 story.

City and County

Ark., Murfreesboro—Prospective estimators on \$50,000 court house and jail, bids Oct. 19 by Pike County Commrs.' Court; Gordon Walker, Rector Bldg., Little Rock; J. H. Reddick, Kennedy Bldg., Fort Smith; Otis Building & Construction Co.; Hardy Construction Co., both Texarkana; J. M. O'Neal, Hope; Witt, Seibert & Halsey, Archts., Texarkana. 10-8

Ky., Williamsburg—Whitley County Fiscal Court remodel court house; \$27,250.

Miss., Yazoo City—Yazoo County Bd. of Supvrs. open bids Oct. 31 for alterations and repairs to court house; \$30,000; stucco work, plastering, tile and terrazzo, steel windows, tile roofing, plumbing, steam heating, elec. wiring, fixtures, etc.; Claude H. Lindsley, Archt., Tower Bldg., Jackson. 9-17

Mo., St. Louis—Bd. of Public Service opens bids Oct. 27 for \$100,000 Biddle Market, site present structure; Italian type, brick, 1 story, 72x194 ft., steel sash, variegated tile roof; 34x110-ft. steel and shingle roof shelter adjoining; conc. platform, limestone, marble, metal doors, steel sash and trim, terra cotta trim, cement floors, conc. foundation; Albert Osburg, Archt.; L. R. Bowen, Ch. Engr., Dept. of Bldgs. and Bridges, both City Hall. 3-26

Mo., Webster Groves, St. Louis—City of Webster Groves opens bids Oct. 30 for \$70,000 city hall; brick and stone, rein. conc., 2 stories, 105 x 40 ft., conc. and comp. floors, conc. foundation, marble, built-up comp. and slate roofing, hollow tile, vaults; furnishings, equipment, etc., \$20,000; Chas. L. Thurston and Trueblood & Graf, Asso. Archts., 1520 Chemical Bldg.; Chas. Martin, Engr., Synd. Trust Bldg. 10-1

Tex., Austin—City, Mrs. Chas. Stephenson, Chmn., Library Bd., University Station, selected H. F. Kuehne, Littlefield Bldg., as archt. for \$150,000 Italian Renaissance type bldg.; conc. and stone, 1-story. 7-30

Tex., Galveston—Bd. of City Commrs., R. F. Williamson, Fire and Police Commr., authorized to call for bids for fire station, 26th and Q Sts. 4-16

Dwellings

Ala., Montgomery—Jas. S. Parrish, 200 Lee

St., may erect \$10,000 brick veneer residence, Agnew St.; 2 stories and basement, comp. roof, hardwood floors, tile baths, steam heat; Richard Ryan, Archt., Winter Bldg.

D. C., Washington—O. W. McDonald, 623 10th St., N. E., has permit for \$11,500 residence, 4925 Blaine St., N. E.; brick, 2 stories.

Fla., Miami—A. F. Kennerdy, 12 N. E. Third Ave., erect 2 dwellings and garages, N. E. 26th St.; rein. conc., conc. block and stucco, \$9000 each; Robt. L. Weed, Archt., 2601 Biscayne Blvd.; owner probably build by day labor.

Fla., Miami Beach—Harry H. Carver, care G. O. Reed & Co., 1345 20th St., erect \$10,000 residence and garage, Royal Palm Ave.; rein. conc., conc. block and stucco; Robt. L. Weed, Archt., 2601 Biscayne Blvd., Miami; bids in.

Fla., Miami Beach—Clarence Cobb, 4501 Prairie Ave., Miami Beach, has permit for \$23,000 residence, Prairie Ave. near 45th St.; conc. block and stucco, Cuban tile bath floors, red Spanish tile roof, Quarry Key stone; Carlos B. Schoeppl, Archt., 2382 N. Alton Rd.

Fla., Ormond—Geo. A. Bowman, 33 W. 42nd St., New York, erect \$30,000 residence; Spanish type, stone, tile and stucco; Harry M. Griffin, Archt., has low bid at \$22,368 from Alex W. Hermanson.

Ga., Sea Island Beach—R. H. White, care Southern Wood Preserving Co., East Point, has low bid from Windsor Construction Co., Brunswick, for residence; Francis L. Abreu, Archt., Brunswick. 10-1

La., New Orleans—Mrs. Henry Howard opens bids Oct. 27 at office Armstrong & Koch Archts., 604 Audubon Bldg., for brick veneer residence, 3513 St. Charles Ave.; 2 stories, steel sash, steel and iron work, flagstone, sheet metal work, slate roof. Following contractors estimating: C. N. Bott, Audubon Bldg.; J. A. Haase Jr., 916 Union St.; John A. O'Brien, La. Bldg.; G. L. Houston, 2437 Fern St.; Geary-Oakes Co., Q. & C. Bldg.

La., New Orleans—Paul G. Charbonnet, 830 Union St., drawing plans for \$10,000 dwelling, Oakridge Park; complete in about 30 days.

Okla., Oklahoma City—Steve Pennington, 1415 N. Indiana St., has permit for 2 brick dwellings, 2628-32 W. 24th St.; total \$10,000.

Okla., Oklahoma City—Oscar Grace, 509 W. 11th St., erect \$10,000 residence, 1129 N. E. 14th St.; brick veneer, 2 stories, 46x48 ft.

Tex., Fort Worth—John C. Ryan, 2744 5th Ave., has permit for \$11,000 brick veneer residence, 2911 Sixth Ave.

Tex., Houston—B. Susholtz, 4720 Labranch St., has permit for 2 brick veneer and frame duplexes, 4810-4902 Shepherd St.; 10 rooms; total \$13,000.

Tex., Houston—D. Summers has permit for \$16,500 residence, 3010 Chevy Chase St.; frame and brick veneer, 8 rooms.

Tex., Lockhart—Fred L. Blundell has low bid from W. C. Eeds, Lockhart, for residence, garage and servants' quarters; Geo. Willis, Archt., Bldrs. Exch. Bldg., San Antonio. 10-8

Tex., Longview—Geo. Kelly has permit for \$10,000 brick veneer residence, S. Center St.

Va., Portsmouth—National Investors, Inc., Geneva Park, Portsmouth, W. B. Shafer, Jr., Norfolk, and Col. Geo. Banks, Geneva Park, purchased about 500 lots near Navy Yard; erect 25 to 100 dwellings; contract for first 2, to cost \$3500 each, Dutch, Colonial and Spanish types, let to Futrell & Graham, Contrs., Norfolk; wood and brick, 6 rooms, 1 and 2 stories, 24 x 40 ft., hardwood and linoleum floors, asphalt shingle roofs, tile, brass and bronze work; expect to purchase several adjoining tracts for dwellings; owner has archt., but contractors may submit plans and prices for small homes. See Want Section—Building Material and Equipment. 10-8

Government and State

Ark., Forrest City—Additional prospective estimators on \$85,000 post office, bids Oct. 19 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington; James I. Barnes, Logansport, Ind.; C. A. Ahlstedt, Forrest City; Jos. A. Tintari, 22 Illinois Ave., Chicago Heights, Ill.; Memphis Construction Co., 160 Union Ave.; Consolidated Contractors, Inc., Box 2671, both Memphis, Tenn.; Chas. Weitz' Sons, Inc., 713 Mulberry St., Des Moines, Iowa; Rosen & Fischel, Inc., 11 S. LaSalle St., Chicago, Ill.; Kellogg & Anderson, Sedalia, Mo.; Hiram Lloyd Building & Construction Co., Synd. Tr. Bldg.; McCarthy Bros. Construction Co., Roosevelt Bldg.; Wm. MacDonald Construction Co.,

all St. Louis, Mo.; Samford Bros., Inc., 301 Washington Ave.; Upchurch Construction Co., Bell Bldg., both Montgomery, Ala.; E. C. Royce Building Co., 115 Pine St., Pine Bluff, Ark.; Theriault Contracting Co., Philadelphia, Pa.; McGough Bros., 1954 University Ave., St. Paul, Minn.; Christy-Dolph Construction Co., Construction Bldg.; L. H. Lacy Co., Burt Bldg., both Dallas, Tex.; Messenger & Dalton, Box 603, Pittsburgh, Kan.; W. B. Smith, Box 1701, El Dorado, Ark.; Cooke & Maxey, Shawnee, Okla.; Ring Construction Co., Wesley Temple Bldg.; Phelps-Drake Co., Inc., Metropolitan Life Bldg., both Minneapolis, Minn.; Landis & Young, S. Jordan Ave., Bloomington, Ind.; McArthur & McLeMore, 611 22nd Ave., Meridian, Miss. 10-8

D. C., Washington—Wark Co., 1608 Chestnut St., Philadelphia, Pa., and Merritt, Chapman & Scott Co., Providence, R. I., additional prospective estimators on \$8,240,000 U. S. Supreme Court Bldg., bids Oct. 21 by Architect of the Capitol, David Lynn. 10-8

Mo., Mountain Grove—Prospective estimators on \$70,000 post office, etc., bids Oct. 19 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington; Memphis Construction Co., Malkin Bldg., Memphis, Tenn.; Gillespie & Daly, Inc., 722 Chestnut St.; R. B. Higgins & Sons, 7023 Dale Ave.; Roach-Lecouture Construction Co., Broadway and Chestnut St.; Hiram Lloyd Building & Construction Co., Synd. Trust Bldg.; Kopman-Alport Co., 1000 Pine St.; McCarthy Bros. Construction Co., Roosevelt Bldg.; Wm. MacDonald Construction Co., Synd. Tr. Bldg.; Lund & Sager, Inc., Wainwright Bldg., all St. Louis, Mo.; L. H. Britton, First Natl. Bk. Bldg., Mountain Grove, Mo.; Samford Bros., Inc., 301 Washington Ave., Montgomery, Ala.; Theriault Contracting Co., 534 E. Johnson St., Philadelphia, Pa.; Ring Construction Co., Wesley Temple Bldg., Minneapolis, Minn.; Sugarman Construction Co., 8th and Tuttle Sts., Des Moines, Iowa; Kellogg & Anderson, Sedalia, Mo.; Messenger & Dalton, Box 603, Pittsburgh, Kan.; Keenan & Graves, Box 372, Rosslyn, Va.; McGough Bros., 1954 University Ave., St. Paul, Minn.; Gurther & Co., Topeka, Kan.; Wm. M. Sistrer Construction Co., Simpson, Ill.; Earl E. Garber & Co., 208 W. Fourth St., Bethlehem, Pa.; H. J. Gilbertson Construction Co., Farnsworth Bldg., Memphis, Tenn.; Davis-Williamson Co., 139 S. Third St., Muskogee, Okla.; Cooke & Maxey, Shawnee, Okla.; H. W. Underhill Construction Co., 235 N. Waco Ave., Wichita, Kan.; Bethel & Son, Granite City, Ill.; George H. Gassman Construction Co., Popular Bluff, Mo.; Phelps-Drake Co., Inc., Metropolitan Life Bldg., Minneapolis, Minn. 10-1

Fla., Miami—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, completing plans for \$65,000 Quarantine Station, Fishers Island, for Public Health Service.

Ga., Macon—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, probably let contract for \$395,000 post office addition early in Dec.

La., Alexandria—U. S. Property & Disbursing Officer for Louisiana, 43 Jackson Barracks, New Orleans, opens bids Oct. 26 for 310 tent floors and fire house, Camp Beauregard.

Md., Aberdeen Proving Ground—Commanding Officer has low bid at \$42,200 from Philip Carey Co., 1400 Moreland Ave., Baltimore, for reroofing 7 bldgs.

Md., Curtis Bay, Baltimore—U. S. Coast Guard Headquarters, Washington, opens bids Oct. 22 for 1-story steel frame bldg., about 61x181 ft., for U. S. Coast Guard Depot; conc. foundation and floor, brick work to under side of window sills, metal siding and steel sash, plumbing, water and sanitary systems, etc. Following contractors estimating: Maryland Metal Building Company, McComas & Rose St.; M. G. Imbach, 4104 Springdale Ave.; Davis Iron Works, Inc., 301 President St.; James J. Vesely Co., 742 N. Kenwood Ave.; Dietrich Bros., 220 E. Pleasant St.; McKay & Kirtland; Century Construction Co., 434 Hearst Tower Bldg.; C. W. Schmidt, Hearst Tower; Herbert J. West, Knickerbocker Bldg.; Mullan Contracting Co., 3945 Greenmount Ave.; Avon Construction Co., 216 E. Lexington St.; T. F. Watts, 12 W. Madison St.; W. E. Bickerton Construction Co., 515 Cathedral St.; Frank Tranzello, 2039 Park Ave.; Burgdorf Construction Co., Brooklyn, all Baltimore; Blaw-Knox Co., Inc., Widener Bldg., Philadelphia, Pa.

Miss., Aberdeen—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, opens bids Nov. '45 for remodeling and extension of post office and court house; \$122,000; drawings from office Supvg. Archt. 10-8

Miss., Columbia—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, selected site, Main St., for post office. 7-9

Mo., Lebanon—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington,

opens bids Oct. 28 for post office, etc.; drawings from office Supvg. Archt.; H. W. Underhill Construction Co., 235 N. Waco Ave., Wichita, Kan., estimating.

Mo., Lebanon—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, opens bids Oct. 28 for post office; drawings from office Supvg. Archt.

N. C., Greensboro—Prospective estimators on \$600,000 post office, court house, etc. (except elevators, etc.), bids Oct. 29 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington; Southern Ferro Concrete Co., Atlanta Trust Bldg.; Grahm Construction Co., Red Rock Bldg., both Atlanta, Ga.; Joe B. Martin, 211 Kinney Bldg.; J. A. Jones Construction Co., Commr. Bk. Bldg., both Charlotte, N. C.; Adams Construction Co., Woodward Bldg., Washington, D. C.; Wise Granite & Construction Co., Inc., Amer. Natl. Bk. Bldg., Richmond, Va.; Dunlap & Co., Inc., Columbus, Ind.; North-Eastern Construction Co., Nissen Bldg., Winston-Salem, N. C.; L. Balkin Co., 1850 W. Austin Ave.; Kralh Construction Co., 350 N. Clark St.; W. E. O'Neil Construction Co., 308 W. Washington St., all Chicago, Ill.; Angle-Blackford Co., Amer. Bk. Bldg., Greensboro; Algernon Blair, First Natl. Bk. Bldg., Montgomery, Ala.; James Baird Co., Inc., 1800 E. St., N. W., Washington; James I. Barnes, Logansport, Ind.; Yeager & Sons, Danville, Ill.; Ralph Sollitt & Sons Construction Co., 518 E. Sample St.; H. G. Christman, both South Bend, Ind.; Jewell-Riddle Co., Inc., Sanford, N. C.; Murch Bros. Construction Co., Ry. Exch. Bldg., St. Louis, Mo.; R. K. Stewart & Son, High Point, N. C.; W. P. Rose Co., Wayne Natl. Bk. Bldg., Goldsboro, N. C.; Mid-Eastern Construction Co., Box 262, Wilmington, Del.; Ralph S. Herzog, 10 S. 18th St., Philadelphia, Pa.; W. E. Rowan, Box 1011, Fayetteville, N. C.; Jas. DeVault, Canton, O. 10-1

N. C., Wadesboro—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, probably call for bids within 2 months for post office, Martin and N. Greene Sts. 9-17

Okla., El Reno—Prospective estimators on 3 bldgs. for first unit of Federal Reformatory, bids Nov. 5 by Dept. of Justice, Bureau of Prisons, Washington; C. L. Smoyer, Ardmore, Okla.; J. E. Dunn Construction Co., Reliance Bldg., Kansas City, Mo.; H. W. Underhill Construction Co., Braniff Bldg.; W. S. Bellows Construction Co., Okla. Sav. Bldg.; Reinhart & Donovan Co., Commr. Ex. Bldg.; Harmon & Mattison Construction Co., Key Bldg., all Oklahoma City; Stewart Iron Works Co., 700 Stuart Block, Cincinnati, O.; National Contracting Co., Minneapolis, Minn.; Long Construction Co., Philtower Bldg., Tulsa, Okla. 10-1

Tenn., Johnson City—Veterans Administration, Room 764, Arlington Bldg., Washington, has low bid from Henry B. Ryan Co., 510 N. Dearborn St., Chicago, Ill., at \$92,000, for hospital addition, connecting corridor and barrack bldg., at \$118,000 Soldiers' Home, including roads, walks, grading and drainage; \$650,000. 10-1

Tex., Galveston—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, approved preliminary plans for \$375,000 immigration station and detention bldg., A. B. 17th and 18th St., detailed drawings under way, probably call for bids soon, Bottomley, Wagner & White, Archts., 60 E. 42nd St., New York. 7-23

Tex., Georgetown—Prospective estimators on \$80,000 post office, etc., bids Oct. 16 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington; H. E. Wattinger & Co., Box 122; J. F. Johnson, Box 479, both Austin. Tex.; Jos. A. Tintari, 22 Illinois St.; West Englewood Construction & Supply Co., 6239 S. Ashland Ave., both Chicago, Ill.; Balfanz Construction Co., Cit. Bank Bldg., Abilene, Tex.; Geo. E. Wieland, Travis Bldg., San Antonio, Tex.; Samford Bros., Inc., 301 Washington Ave., Montgomery, Ala.; Theriault Contracting Co., 534 E. Johnson St., Philadelphia, Pa.; Chas. Weitz' Sons, Inc., 713 Mulberry St., Des Moines, Iowa; Quisile & Andrews, 2212 W. Seventh St.; Jas. T. Taylor, Aviation Bldg., both Fort Worth, Tex.; Christy-Dolph Construction Co., Constr. Bldg.; Thomas & Yarbrough, Kirby Bldg.; L. H. Lacy Co., Burt Bldg.; A. J. Rife Construction Co., 1913 N. Harwood St., all Dallas, Tex.; Wm. W. Sistrer Construction Co., Simpson, Ill.; Landis & Young, S. Jordan Ave., Bloomington, Ind.; Phelps-Drake Co., Inc., Metropolitan Life Bldg., Minneapolis, Minn.; Robt. E. McKee, 1900 Texas St., El Paso, Tex.; McGough Bros., 1954 University Ave., St. Paul, Minn.; Kellogg & Anderson, Sedalia, Mo.; J. S. Harrison Construction Co., Waco, Tex.; M. H. Ryland, Uvalde, Tex. 10-1

Tex., Memphis—Prospective estimators on post office, etc., bids Oct. 20 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington; H. W. Underhill Construction Co., Oliver-Eagle Bldg.; W. Frank Little

Construction Co., Amarillo Bldg., both Amarillo, Tex.; Balfanz Construction Co., Cit. Bk. Bldg., Abilene, Tex.; Chas. Weltz' Sons, Inc., 713 Mulberry St., Des Moines, Iowa; Theriault Contracting Co., 534 E. Johnson St., Philadelphia, Pa.; James T. Taylor, First Natl. Bk. Bldg., Fort Worth, Tex.; Wm. MacDonald Construction Co., Synd. Tr. Bldg., St. Louis, Mo.; Kollogg & Anderson; T. H. Johnson, Cit. Natl. Bk. Bldg., both Sedalla, Mo.; Samford Bros., Inc., 301 Washington Ave.; Algernon Blair, First Natl. Bk. Bldg., both Montgomery, Ala.; Christy-Dolph Construction Co., Construction Bldg., Dallas, Tex.; Landis & Young, S. Jordan Ave., Bloomington, Ind.; Kreipke Construction Co., 915 W. Grand St., Oklahoma City, Okla. 10-1

Tex., Randolph Field—Constructing Quartermaster has low bid at \$12,495 from Southwestern Specialty Co., 125 Guadalupe St., San Antonio, for kitchen equipment for cadet barracks group. 9-17

Tex., San Benito—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, probably call for bids in about 10 days for \$125,000 Federal bldg., Sam Houston Ave., and Hix St. 11-13-29

Va., Danville — Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, approved rough sketches for \$390,000 post office, Main and Ridge Sts.; J. B. Heard, Archt., Masonic Temple Bldg., Danville. 7-23

W. Va., New Martinsville—Prospective estimators on \$75,000 post office, bids Oct. 21 by Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington; Gernert-Ryan Co., 1700 Walnut St.; Nicholas Co., 4848 Lancaster Ave.; Theriault Contracting Co., 534 E. Johnson St., all Philadelphia, Pa.; R. Mankin & Co., Huntington, W. Va.; A. M. Lundberg, St. Louis, Mo.; Galbreath & Leonard, Inc., 42 E. Gay St., Columbus, O.; Arthur F. Perry, Jr., Barnett Natl. Bank Bldg., Jacksonville, Fla.; T. O. Johnson, Middlebourne, W. Va.; Thos. P. Keenan & Co., Goff Bldg.; Henry Haslebach, Box 886; Picco & Marra, Station A, all Clarksburg, W. Va.; J. A. Freilino & Co., P. O. Bldg., Leechburg, Pa.; Guy Johnston Lumber & Supply Co., N. Seventh St., Steubenville, O.; Dunlap & Co., Inc., Columbus, Ind.; C. W. Dowling & Co., Williamstown, W. Va.; Algernon Blair, First Natl. Bank Bldg.; Samford Bros., Inc., 301 Washington Ave., both Montgomery, Ala.; Skene-McAlpin Construction Co., Point Pleasant, W. Va.; P. W. Johnson, Portsmouth, O.; Baker & Coombs, 319 Demain Ave., Morgantown, W. Va.; Adams Construction Co., Woodward Bldg.; Steven & Son Co., 729 15th St., N. W., both Washington; Wm. MacDonald Construction Co., Synd. Tr. Bldg., St. Louis, Mo.; Landis & Young, S. Jordan Ave., Bloomington, Ind.; Wilson Co., Charlottesville, Va.; Unkefer Bros. Construction Co., Fulton Bldg., Pittsburgh, Pa.; Earl E. Garber & Co., Inc., 203 W. Fourth St., Bethlehem, Pa.; W. J. Paul, 2005 W. Maple Ave., Zanesville, O.; John M. Kisner & Bro. Lumber Co., 208 Norfolk Ave., Fairmont, W. Va.; Julius Yuhasz, 4174 Connecticut Ave., Gary, Ind.; Wendling Bros. Co., Dover, O. 10-1

Hospitals, Sanitariums, Etc.

Ark., North Little Rock, Little Rock—Additional prospective estimators on clinical bldg., U. S. Veterans Hospital, bids Oct. 20 by Veterans Administration, Arlington Bldg., Washington; H. A. McGuire & Co., Inc., Dermott Bldg., Memphis, Tenn.; Marshall Bros. Co. (elevators), 2015 Mary St., Pittsburgh, Pa.; Nathan Wohlfield, Construction Bldg., Dallas, Tex.; Pehrson Bros., Gateway Bldg.; Ring Construction Co., Wesley Temple Bldg.; Naugle-Leck, Inc., 518 Baker Arcade, all Minneapolis, Minn.; Batson-Cook Co., Inc., West Point, Ga.; Odom & Pfeuger Electric Construction Co., Inc., 1106 N. Second St., Monroe, La.; O. M. Gwin Construction Co., 3503 Fern St., New Orleans, La.; Pelligreen Construction Co., 816 Pine St., St. Louis, Mo.; Stewart-McGehee Construction Co., Rector Bldg.; Gordon Walker, 1014 Rector Bldg., both Little Rock; Columbia Engineering Co., Equitable Bldg., Baltimore, Md.; Rogers & Leventhal, Box 173, Chattanooga, Tenn.; Brasted Co., 452 N. Main St., Wichita, Kan.; Tri-State Electric Co., 805 W. College St., Carbondale, Ill.; Jos. A. Holpuch Co., 4010 W. Madison St., Chicago, Ill.; Westinghouse Electric Elevator Co., 30th and Walnut Sts., Philadelphia, Pa.; Thos. L. Dawson, 2035 Washington St., Kansas City, Mo.; W. H. Horster, Exch. Bk. Bldg., Tulsa, Okla. 10-8

D. C., Washington—Department of Interior opens bids Nov. 17 for 2 continued treatment bldgs. Nos. 1 and 2, 1 dining hall and kitchen bldg., and connecting corridors, St. Elizabeth's Hospital, including plumbing, heating and ventilating, elec. work, special hospital equipment, and outside service connections; separate bids for elec. freight elevator and for refrigerating plant; brick, stone trim, struc.

steel and conc.; \$825,000; drawings from Constr. Service, Room 764, Arlington Bldg. 6-25

Md., Baltimore—City, Bernard J. Crozier, Ch. Engr., City Hall, opens bids Oct. 21 for furniture for \$700,000 nurses' home, Baltimore City Hospitals; Palmer & Lambdin, Archts., 513 N. Charles St. 10-1

Miss., Jackson—State Hospital Removal, Improvement and Land Sale Comsn., New Capitol Bldg., opens bids Oct. 17 for \$35,000 patients' cottage Type B No. 4, Negro Group No. 2; for potato curing and storage house; for linen chutes; plans from N. W. Overstreet, Archt., Standard Life Bldg., Jackson; Vinson B. Smith, Advisory Archt., Gulfport. 10-1

Miss., Jackson—State Hospital Removal, Improvement and Land Sale Comsn. has low bid at \$40,648 from J. O. Manning, Canton Bldg., for 6 doctors' dwellings; plumbing and heating, Payne Heating & Power Co., \$4199; elec. work, E. W. Cook, 429 E. Capitol St., \$856; low bid at \$21,274 from Payne Heating Co. for heating and plumbing for receiving bldg., Negro Group No. 3, and at \$2875 from J. A. Williams, 1530 4th Ave., for elec. work; N. W. Overstreet, Archt., Standard Life Bldg., all Jackson; Vinson B. Smith, Advisory Archt., Gulfport. 10-1

Mo., St. Louis—Bd. of Public Service approved ordinance appropriating \$300,000 for first unit (service bldgs.) of Negro City Hospital, Whittier St. and St. Ferdinand Ave.; ultimate cost \$2,000,000; Albert Osburg, Archt., L. R. Bowen, Engr., both City Hall. 5-14

S. C., Columbia—Prospective estimators on bids Nov. 14 by Veterans Administration, \$1,300,000 Veterans Administration Hospital, Arlington Bldg., Washington; Rogers & Leventhal, Box 173, Chattanooga, Tenn.; Murch Bros. Construction Co., Ry. Exch. Bldg.; Wm. MacDonald Construction Co., Synd. Trust Bldg., both St. Louis, Mo.; Ralph Sollitt & Sons Construction Co., 518 E. Sample St.; H. G. Christman Co., both South Bend, Ind.; Algernon Blair, First Natl. Bk. Bldg., Montgomery, Ala.; H. B. Nelson Construction Co., Tuscaloosa, Ala.; Batson-Cook Co., Inc., West Point, Ga.; Olaf Otto, 412 Bay St., East, Savannah, Ga.; Henry B. Ryan Co., 500 N. Dearborn St.; L. Balkin Co., 1850 W. Austin Ave.; W. E. O'Neil Construction Co., 308 W. Washington St.; Singer-Kennedy Corp., 203 S. Dearborn St.; Continental Chimney Co., Inc., 127 N. Dearborn St., all Chicago, Ill.; W. S. Barstow, 412 Washington St., Reading, Pa.; North-Eastern Construction Co., Nissen Bldg., Winston-Salem, N. C.; James I. Barnes, Logansport, Ind.; York Construction Co., Box 306, Raleigh, N. C.; Salem Foundry & Machine Works, Inc., Salem, Va.; Pennsylvania Engineering Co., 1119 N. Howard St.; York Ice Machinery Corp., 1238 N. 44th St., both Philadelphia, Pa.; Virginia Engineering Co., Inc., First Natl. Bk. Bldg., Newport News, Va.; J. A. Jones Construction Co., Commr. Bk. Bldg.; McClelland Co., 122 Brevard St.; J. J. Nolan & Co., Inc., 235 Court Ave., Memphis, Tenn.; (plumbing and heating), John C. Heslep, Carolina Bk. Bldg.; W. B. Guimarin & Co., Box 898, both Columbia; (p. and h.), Wm. Wilby (p. and h.), Salem, Ala.; Chas. T. Taylor (p. and h.), 17 S. King St., Hampton, Va.; B. L. Williams, Inc., (p. and h.), 318 Hamilton Ave., Norfolk, Va.; J. L. Powers (p. and h.), 227 E. Main St., Bennettville, S. C.; Jas. Reid (p. and h.), 41 W. 26th St., Bayonne, N. J.; Mason & Dullon (p. and h.), 3024 Third Ave., South, Birmingham, Ala.; Redmon Heating Co., 124 N. Fourth St., Louisville, Ky.; Freyn Bros. of Michigan, Inc. (p. and h.), 3850 Michigan Ave., Detroit, Mich.; C. A. Hooper Co. (p. and h.), 453 W. Gilman St., Madison, Wis.; Robinson Bros. (p. and h.), Pine Bluff, Ark.; Industrial Heating & Engineering Co. (p. and h.), Milwaukee, Wis.; Gowans-Hailey Co. (p. and h.), 167 Second Ave., S., Nashville, Tenn.; Vilter Manufacturing Co. (refrigeration), Milwaukee, Wis.; Columbus Iron Works Co., Columbus, Ga.; Frick Co. (refrig.), Albee Bldg., Washington; Buffalo Refrigerating Machine Co., 39 Lafayette St., Brooklyn, N. Y.; Ottenheimer Bros., Inc. (refrig.), Front and Bath Sts., Baltimore, Md.; Rust Engineering Co. (chimneys), Pittsburgh, Pa.; H. R. Heinicke (chim.), 221 S. New Jersey St., Indianapolis, Ind.; Alphonse Custodis Chimney Construction Co., 95 Nassau St., New York. 10-1

Va., Lynchburg—City, R. W. B. Hart, City Mgr., has low bid at \$31,574 from W. K. Barger, Peoples Natl. Bank Bldg., for addition to Lynchburg Hospital; heating \$3400, H. B. Watson. 6-18

Va., Norfolk—City Council erect \$30,000 bldg. at municipal welfare center, Princess Anne County, for Henry A. Wise Memorial Hospital.

Va., Norfolk—City Council has low bid at \$80,330 from R. R. Richardson & Co.,

Natl. Bank of Commerce Bldg., for dormitory, Municipal Hospital; Wickham C. Taylor, Archt., Cit. Bank Bldg. 9-10

Hotels and Apartments

Ga., Augusta—H. F. Burum, 2306 Walton Way, opens bids Nov. 2 (extended date) at office Scroggs & Ewing, Archts., S. F. C. Bldg., for \$500,000 hotel, 843 Broad St.; estimators and description lately noted. 10-8

N. C., Charlotte—Sherrill Realty Co., Johnston Bldg., has contract to erect \$100,000 apartment, Morehead St. and Queens Rd.; brick and limestone, 128x89 ft., elevators, garage space in basement; M. R. Marsh, Archt., Builders Bldg.

Miscellaneous

D. C., Washington—James H. Grant, Archt., 1719 I St., receiving bids for studio bldgs., 2430-32 K St., N. W.; brick, stone trim, 2½ stories, copper work, slag roof.

Fla., Tampa—Jai-Lai Amusement Corp., Benj. Alvarez, Pres., considers erecting \$90,000 structure; 2 stories, 209x95 ft.; Fred J. James, Archt.; indefinite as yet.

Schools

Ala., Autaugaville—State Dept. of Education, Montgomery, erect brick veneer or brick and tile school; 1 story, 10 rooms and auditorium; plans by Mr. Ditmar, care owner; address proposals on furnishings, equipment, etc., to Mr. Ledbetter, care owner; other proposals to W. H. McDaniel, County Supt. of Education, Prattville. 8-13

Ala., Covington—Bd. of Education plans 1-story frame school; wood floors, comp. roof; preliminary plans being drawn by State Dept. of Education, Montgomery.

Ala., Tuskegee—Tuskegee Normal & Industrial Institute, care Taylor & Persley, School Archts., opened bids Oct. 15 for \$200,000 Thomas A. Edison Science Bldg.; rein. conc. brick and hollow tile, stone trim, 3 stories and basement, 81x164 ft., comp. roof; steel frame, conc. joist, hollow tile, steel sash, brick, stone trim, 81x164 ft., asbestos tile floors, rein. conc. foundation, metal doors, Barrett 20-yr. flat roof, sprinklers, steel sash and trim; furnishings, equipment, etc., \$75,000; C. E. Posey, Engr., 2150 11th Court, South; Fosdick & Hillmer, Const. Mech. EEngrs., Union Trust Bldg., Cincinnati, O. Following contractors estimating; Alken & Faulkner, 158 Auburn Ave., N. E. Atlantag, Ga.; T. C. Windham, 1320 Fourth Ave., N. Birmingham, Ala.; James Alexander, Upper Wetumpka Road, Montgomery, Ala.; McKissack & McKissack, Morris Memorial Bldg., Nashville, Tenn. 10-7

Ark., Wynne—Wynne School Dist. voted \$20,000 school bonds. 10-1

Ga., Atlanta—Atlanta University, Dean Sage, Pres., Bd. of Trustees, announced \$1,000,000 gift; \$625,000 to be used for 5 bldgs., \$40,000 to renovate class room bldgs. and \$335,000 retained for bldg. maintenance; James Gamble Rogers, Inc., Archt., 154 E. 46th St., New York. 1-1

Ga., Atlanta—Emory University, Dr. Harvey Cox, Pres., probably have plans ready latter part of Nov. for \$200,000 gymnasium-student activities bldg.; fireproof, rein. conc. struc. steel, brick and tile, 2 stories, comp. roof; Hentz, Alder & Shultz, Archt., 1330 Candler Bldg.; Robert & Co., Inc., Const. Engrs., Bona Allen Bldg., both Atlanta. 7-2

Ga., Augusta—Paine College Bldg. Comm. suggests \$250,000 bldg. program over 10-yr. period; would include \$150,000 chapel and religious education bldg., \$10,000 to \$15,000 gymnasium and field house, \$40,000 to \$50,000 dining room and kitchen, and teachers' cottages, \$15,000; no building this year.

La., Kentwood—Tangipahoa Parish School Bd., Amite, opens bids Nov. 17 for brick high school; 2 stories and basement, tile roof, rein. conc. foundation, steel and iron work; gymnasium-auditorium; Favrot & Livaudais, Ltd., Archts., Nola Bldg., New Orleans; plans about Oct. 15. 8-27

La., Lake Charles—Calcasieu Parish Police Jury have plans ready about Nov. 15 for \$75,000 LaGrange School; brick, 2 stories; Herman J. Duncan & Co., Inc., Archts., 120 Murray St., Alexandria.

La., Mansfield—De Soto Parish School Bd., C. M. Shows, Sec., rejected bid for gymnasium and cafeteria on school grounds; call for new bid later.

La., Shreveport—Caddo Parish School Bd. plans school, western section, vicinity Fetzter Ave.

Md., Annapolis—Anne Arundel County Public School Bldg. Comsn., Geo. Fox, Sec., erect high school; working drawings being prepared; Buckler & Fenhagen, Archts., 325 N. Charles St.; Wm. H. Emory, Jr., Asso.

Archit.; Herman F. Doeleman, Struc. Engr.; Jas. Posey, Mech. Engr., all Balto. Trust Bldg.

Md., Baltimore—Jesuit Fathers, Rev. Ferdinand C. Wheeler, Pres., Loyola High School, selected John A. Ahlers, 327 N. Charles St., as archit. for first unit of high school, Boyce Ave. near Charles St. Ave. 9-24

Md., Baltimore—State, Dr. Geo. C. Finney, member, selection comm., 3119 St. Paul St., selected Henry Powell Hopkins, 10 E. Mulberry St., as archit. for \$150,000 Maryland Training School for Colored Girls; site not selected.

Md., Glen Burnie—Anne Arundel County Public School Bldg. Comsn., Geo. Fox, Sec. Treas., opens bids Oct. 20 for brick high school; \$200,000; plans from Buckler & Fenhagen, Archts., 325 N. Charles St., Baltimore, or from Supt. of Schools; Wm. H. Emory, Jr., Asso. Archit., Balto. Trust Bldg., Baltimore. Following contractors estimating:

Century Construction Co., Hearst Tower; Globe Engineering Co., 2701 Lauretta Ave.; Lacchi Construction Co., 1818 Munsey Bldg.; Price Construction Co., Md. Trust Bldg.; Herbert J. West, Knickerbocker Bldg.; Julius A. Knelein, Amer. Bldg.; Mullan Contracting Co., 3945 Greenmount Ave.; M. A. Long Co., 10 W. Chase St.; P. C. Street Engineering Co., 404 St. Paul St.; Thos. Hicks & Sons, 106 W. Madison St.; Chas. L. Stockhausen Co., Marine Bank Bldg.; Henry L. Maas & Sons, Inc., 1119 Ensor St.; Consolidated Engineering Co., Inc., 20 E. Franklin St.; North-Eastern Construction Co., 6 W. Madison St.; C. W. Littleton & Son, 4313 Liberty Heights Ave.; Ralph MacMurray, 39th St. and Old York Rd.; Edw. W. Wieward (elec.), 3407 Chesley Ave.; W. E. Bickerton, 515 Cathedral St.; Cogswell Construction Co., 406 Park Ave.; David M. Andrew Co., Sisson and 26th Sts.; Frainie Bros., 19 W. Franklin St.; De-Cou & Chidlaw, Eutaw and Biddle Sts.; J. L. Robinson Construction Co., 9 W. Chase St.; Edw. A. Cullings, 692 Gladstone Ave.; Ralph W. Simmers, 4547 Harford Road; Edw. G. Turner, 2133 Maryland Ave.; L. L. Chambers, Inc., 36th St. and Roland Ave., all Baltimore; Minter Homes Corp., Dundalk; Carlson & Carlson; Saml. B. Dove; Goode Construction Co., all Annapolis; Wm. H. Sands, Towson. 9-17

Okla., Boise City—City probably soon call for bids for \$44,000 high school; bonds approved.

Tex., Gatesville—State Bd. of Control, Austin, receiving bids for dormitory, State Juvenile Training School for Negro Boys; brick and rein. conc., \$30,000; T. Brooks Pearson, Archt., First State Bank Bldg., Waco. 7-23

Tex., Longview—Longview Independent School Dist., H. L. Foster, School Supt., selected Mark K. Lemmon, 1910 Tower Petroleum Bldg., Dallas, archit. for senior high school; brick and rein. conc.; \$175,000 bonds voted for school improvements.

BUILDING CONTRACTS AWARDED

Bank and Office

Ga., Atlanta—Barge-Thompson Co., 136 Ellis St., N. E., has contract to remodel and enlarge 11-story Trust Co. of Georgia bldg., Pryor and Edgewood Ave.

Mo., Kansas City—New York Life Insurance Co., reported, modernizing New York Life Bldg.; \$250,000; Henry-Lourey Engineering Co., Engrs., 114 W. Tenth St.; work by sub-contract. 7-2

Churches

D. C., Washington—Wisconsin Ave. Baptist Church, Wm. E. Gore, Chmn., Bldg. Comm. and Contr., 5211 Wisconsin, erect superstructure, 42nd and Fessenden Sts.; stone or brick, steel, fireproof, 3 stories and basement, slate roof, steam heat; auditorium; classrooms; Geo. E. Merrill, Archt., 25 E. 26th St., New York.

Md., Baltimore—East Baltimore Station M. E. Church, Eugene M. Thomas, member, 700 E. 33rd St., let contract to Century Construction Co., Hearst Tower, to rebuild burned structure; \$10,000.

N. C., Asheville—St. Marks United Lutheran Church let contract for \$18,000 bldg., Liberty and Chestnut Sts., to Robinson Bros., Inc., Arcade Bldg.; common brick, stone trim, conc. foundation, comp. roof; Lord & Lord, Archts., 17 Church St. 10-1

City and County

Ark., DeWitt—Arkansas County Court House Comsn. about completing wrecking

Tex., San Antonio—City Bd. of Education, Mrs. J. E. King, Pres., probably open bids about Jan. 1 for \$650,000 South Side Senior School, S. Pine, Astor and Fair Aves.; preliminary plans being drawn, probably start working drawings in about 2 weeks; rein. conc. and brick, 2 stories, irregular dimensions, site 425 x 550 ft., conc. foundation, flat tar and gravel built-up roof, cast stone, dumb waiters, elec. refrigerators, hardwood, linoleum and comp. floors, metal doors, rolling partitions, steel sash and trim; Ralph H. Cameron, Majestic Bldg., Geo. Willis, Bldrs. Exch. Bldg., and Herbert S. Green, Morris Plan Bk. Bldg., Asso. Archts.; W. E. Simpson Co., 942 Milam Bldg., Const. Engrs., and J. W. Beretta Engineers, Inc., 1203 Natl. Bk. of Commerce Bldg., Asso. Struc. Engrs.; L. D. Royer, Mech. Engr., Smith-Young Tower; Phelps & DeWees, School Archts., Gunter Bldg. 10-6

Tex., San Antonio—City Bd. of Education, Mrs. J. E. King, Pres., has low bid at \$23,690 from Moeller & Weibacher, 1211 Willow St., for physical education addition to Brackenridge High School; low plumbing and heating bid from A. H. Shafer, 829 N. St. Marys St., at \$5733; elec. work, Thomson Electric Co., 1615 Broadway, \$333; Frost Natl. Bank Bldg.; L. D. Royer, Mech. Engr., Smith-Young Tower; Phelps & DeWees, School Archts., Gunter Bldg. 10-1

Tex., Taylor—St. Marys R. C. Church, Rev. Theo. Drees, Pastor, plans parochial school to replace present structure.

Stores

Ark., Mount Ida—Dr. J. D. Robbins erect stone bldg. to replace structure noted burned.

Fla., Williston—Barton Estate, Miller Barton, erect 2-story brick grocery and general merchandise business bldg., Noble Ave. and Main St.; probably soon start work.

Ga., Augusta—W. T. Grant & Co., R. H. Fogler, Const. Engr., 1441 Broadway, New York, erect brick and stone trim store; 2 stories, conc. foundation, comp. roof; completing plans.

Ga., Thunderbolt—G. H. Brooks and V. M. Winters plan store, Falligant and College Aves.

La., Pineville—Earl A. Moore erect \$15,000 store, Main St.; 70 ft. front; 2 stories.

Tex., San Antonio—W. R. Blagg, care Phelps & DeWees, Archts., Gunter Bldg., erect Handy Andy Store, McCullough St. and Olmos Drive; conc. block and stucco, 47x67 ft.

Va., Petersburg—J. C. Penney Co., 330 W. 34th St., New York, E. G. Welch, local mgr., erect semi-fireproof bldg., 12-14 N. Sycamore St.; semi-fireproof, 2 stories and basement, 40x166 ft.; \$100,000, including site; J. C. Blazek, Archt.; bids about Oct. 10.

bldg. on site of \$49,000 court house; 3 stories, 130x60 ft., hardwood and tile floors, conc. foundation, built-up asphalt roof, steel sash and trim, use old vaults; H. Ray Burks, Archt., Wallace Bldg., Little Rock; E. V. Bird Construction Co., Fayetteville. 9-10

Ga., Albany—City Comsn. let contract to J. E. Wallis, Albany, for \$10,000 library improvements; brick, 1 story, conc. foundation, stone trim, comp. roof; Ivey & Crook, Archts., Candler Bldg., Atlanta. 7-16

Md., Cambridge—Dorchester County Bd. of Commrs., Edwin S. Lake, Sec., Bldg. Comm., let contract to C. E. Brohawn & Bros., Cambridge, for \$75,000 court house remodeling and addition; brick and stone, 2 stories, fireproof conc. vaults; install heating plant in jail; Wm. F. Stone, Archt., 2612 N. Charles St.; Henry Adams, Mech. Engr., Calvert Bldg., both Baltimore. 9-24

Okla., Waurika—Jefferson County Bd. of Commrs. let contract at \$41,250 to W. S. Scott for court house; brick, stone and rein. conc., 4 stories, 66x66 ft.; Layton, Hicks & Forsyth, Archts., Braniff Bldg., Oklahoma City. 9-17

Tex., Lampasas—City, J. C. Abney, Mayor, let contract for \$20,000 city hall to Ruble Shanks, Lampasas; brick and rein. conc., 2 stories and basement, 80x49 ft., wood floors; separate 1-story bldg. for fire station; Roy L. Thomas, Archt., Littlefield Bldg., Austin. 9-24

Dwellings

D. C., Washington—O. W. McDonald, care Sears, Roebuck & Co., Contrs., 1106 Connecticut Ave., erect \$11,500 residence, 4925

Blaine St., N. E.; brick and hollow tile, 2 stories, asphalt shingle roof, hot water heat.

D. C., Washington—C. W. Morris & Son, Evans Bldg., erect 8 brick dwellings, 411-15 Hamilton St.; 2 stories, tin roofs, hot water heat; total \$50,000; owners build.

D. C., Washington—District Construction Co., 11-03 Vermont Ave., erect \$10,000 dwelling, 1425 Juniper St.; brick, 2 stories, slate roof, hot water heat; H. P. Baxter, Archt., 810 18th St., N. W.

Fla., Miami Beach—Clayton E. Shappell, 12th St., completing plans for \$25,000 residence and garage, Flamingo Drive near 33rd St.; plans by M. M. Vaviloff; owner soon start work.

Fla., Miami Beach—Jacques Haest, 1654 Alton Rd., has permit for \$10,000 residence and garage, 1215 West Ave., rein. conc., conc. block and stucco, tile and comp. roof; Paist & Stewart, Archts., Ingraham Bldg.; J. B. Carroll, Contr., both Miami; work started.

Ga., Atlanta—W. W. Hood, 1021 Virginia Ave., N. E., erect brick veneer residence, 1329 Avalon Place, N. E.; 1-story, comp. roof, hot air heat; owner builds.

Ga., Atlanta—J. B. Richardson, Jr., 240½ Ivy St., erect brick veneer residence, 2030 Palifax Ave., N. E.; 1 story, comp. roof, hot air heat; owner builds.

Ga., Atlanta—Chas. E. Trout, care Atlanta Conservatory, erect brick veneer residence, Piedmont Rd., Garden Hills; 1 story and basement, comp. roof; owner builds.

La., Donaldsonville—E. L. Markel, Contr., 3838 Louisiana Ave. Pkwy., New Orleans, drawing plans for 2 single brick veneer and 1 single weatherboard dwelling; ready for sub-bids in about 1 week on painting, tile work, lumber, roofing, millwork, glazing, flooring, plastering, carpentry, screening, elec. wiring.

Md., Baltimore—Frank Novak Realty Co., 33rd St., erect 20 brick dwellings, 3400 block Chesterfield Ave.; 2 stories, 16x48 ft.; total \$40,000; plans and constr. by owner.

Md., Baltimore—Geo. Ament, 902 W. 36th St., erect stucco residence, Manhattan and Narcissus Aves.; 2 stories, 26x29 ft.; M. L. Robertson, Contr., 3408 Chestnut Ave.

Md., Baltimore—John Paul, care John H. Otto, Contr., Fullerton, erect cinder block and stucco residence, 3013 Northern Pkwy.; 1 story, 28x44 ft. and 20x20 ft.

Mo., Joplin—Geo. F. Smithey, Contr., 904 N. Jackson St., erecting English type brick dwelling, Roanoke Crest; 7 rooms; considers erecting 1 or more other dwellings during Fall.

Okla., Tulsa—A. D. Peragen, 2708 E. 26th St., started work on \$14,000 residence; brick veneer, 2 stories; M. M. Kirksey, Contr., 1332 S. Jamestown St.

Tex., San Benito—Frank Bayerl started work on \$12,000 to \$15,000 English residence, Bayview Citrus Groves.

Tex., Fort Worth—John C. Ryan, Jr., 3001 Fifth Ave., completed basement for \$14,000 residence, garage and servants' quarters, 2911 Sixth Ave.; brick veneer, two stories and basement, 32x40 ft., wood shingle roof, metal lath, tile baths; Stewart Moore, Archt., 709 Flatiron Bldg.; A. O. Bauer, Contr., 2733 Stewart Drive.

Va., Urbanna—Wm. Lawrence Bogert may remodel and enlarge residence, Rosegl Estate; \$25,000; build chimney only now; other work probably be done in Spring; Buckler & Fenhagen, Archts., 325 N. Charles St.; Jas. Posey, Engr., Balto. Trust Bldg.; Willard E. Harn, Inc., Contr., 2314 Oak St., all Baltimore, Md.

Government and State

Ala., Maxwell Field, Montgomery—Constructing Quartermaster let contract at \$17,946 to Smith-Pew Construction Co., 435 Irvin St., N. E., Atlanta, for stable; hollow tile, stucco, limestone, 1 story, metal lath, steel sash, conc. foundation, tile roof. 10-8

Ark., Little Rock—Arkansas Marble & Tile Co., 217 W. 7th St., Little Rock, has \$40,000 to \$50,000 marble (Batesville) and tile contract for \$1,435,000 Federal bldg.; J. P. Farnsworth & Co., Inc., Contrs., Maritime Bldg., New Orleans, La. 10-8

Fla., Miami—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, let contract at \$1,032,472 to Ralph Sollitt & Sons Construction Co., 1363 Bldrs. Bldg., 228 N. LaSalle St., Chicago, Ill., for superstructure of post office, court house, custom house, etc.; faced with Quarry Key stone, hollow tile back, Italian Renaissance type, tile roof, 3 stories and basement, 254x215 ft., 44x70-ft. Federal court room with acoustical stone above wainscot, marble floors, forced ventilation system, air purification system; Phineas E. Paist & Harold D. Stewart, Archts.; L. Murry Dixon, Asso. Archt., all

Ingraham Bldg., Miami, and Ponce de Leon Entrance Bldg., Coral Gables, Fla.; Maurice H. Connell, Mech. Engr., McAllister Hotel Bldg., Miami; Harvey Baxter, Struc. Engr., 518 Harding St., P. O. Box 65, Coconut Grove, Miami. 9-24

Ga., Atlanta—Kilby Car & Foundry Co., Anniston, Ala., reported, has contract for 200 tons conc. bars for foundation and tunnel work for \$1,500,000 post office and Federal bldg.; National Construction Co., Tower Bldg., Washington, has contract at \$249,000. 9-17

Ga., Milledgeville—State started work on hospital bldg., state farm for tubercular prisoners; brick, accommodate 200.

Ky., Corbin—J. W. Tankersley erect bldg. to be leased to Government for post office; 50x30 ft., 50x30-ft. covered court, brick, 1 story, plate glass front, skylight; Government to furnish equipment; ground broken.

Mo., Caruthersville—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, let contract at \$64,200 to Chas. H. Barnes, 312½ Fifth St., Logansport, Ind., for post office; brick, Carthage stone, conc. floor slab, 2 stories and basement, 93.4x52.1 ft., hardwood, linoleum, terrazzo flooring, marble, metal doors, rolling partitions, elec. refrigerators, built-up slate and comp. roof, hollow tile, vaults, brass and bronze work. 10-8

Tex., Wichita Falls—Treasury Dept., Jas. A. Wetmore, Act. Supvg. Archt., Washington, let contract at about \$408,800 to J. W. Underhill Construction Co., Construction Bldg., Dallas, Tex., for Classic type post office, court house, etc.; limestone, 3 stories and basement, 203x129 ft., metal exterior sash and doors, fireproof steel interior, marble, terrazzo, tile and linoleum and hardwood floors, oak and walnut trim; hollow metal partitions, built-up comp. roof, conc. foundation, rein. conc. frame, mail chutes, metal doors, gypsum, hollow and interior tile, brass and bronze work; Voelcker & Dixon, Inc., Archts., Perkins-Snyder Bldg., H. M. Evans, Engr., both Wichita Falls; elevators at \$22,392 to S. Heller Elevator Co., Milwaukee, Wis. 8-27

Va., Langley Field, Hampton—Constructing Quartermaster opens new bids Oct. 26 for 2 Air Corps warehouses; about \$100,000. 10-8

Hospitals, Sanitariums, Etc.

Md., Catonsville, Baltimore—Subcontracts let on alterations to criminal insane bldg., Spring Grove State Hospital: Iron, steel, wire doors, etc., Maryland Steel Products, Standard Oil Bldg.; steel sash, W. Bailey Co.; lumber, James Lumber Co., 921 Aliceanna St.; paint, Cosmo Larichuta, 4945 Edgemere Ave.; flooring, Laid-Rite Flooring Co., 641 W. Baltimore St.; sheet metal, Wm. F. Zellers, 613 W. Cross St.; roofing, Wm. Carthe Co., 2318 Oak St.; glass, Swindell Bros., Bayard and Russell Sts., all Baltimore; brick work, Wesley Shipley, Relay; Henry Powell Hopkins, Archt., 10 E. Mulberry St.; Jas. Posey, Engr., Balto. Trust Bldg.; Thos. Hicks & Sons, Inc., 106 W. Madison St., all Baltimore. 10-1

Va., Richmond—City let contract at \$70,000 to John T. Wilson Co., Inc., Mutual Bldg., for brick and bar joist infirmary and administration bldg., Pine Camp Sanatorium; former 2 stories, 40x175 ft., latter 1 story, 32x70 ft., tile and conc. floors, conc. foundation, built-up roof; Carneal, Johnston & Wright, Archts., Electric Bldg. 10-8

Hotels and Apartments

D. C., Washington—Dorothy L. Myers, 927 15th St., erect 4-suite apartment, 1220 R St.; brick, 2 stories, 21x52 ft., tin roof; W. B. Honey, Archt., 1235 Morse St., N. E.; Fuller & Alken, Contrs., 927 15th.

D. C., Washington—Breuninger & Phifer, 1103 Vermont Ave., erect brick and hollow tile apartments, 709-15 Irving St., N. E.; 2 stories, 34x38 ft., slag roof, hot water heat; owners build.

D. C., Washington—Webster Construction Co., care Minkoff & Smith, 1308 Decatur St., erect 69-suite apartment, Longfellow St. and Colorado Ave.; brick, hollow tile, limestone trim, 5 stories, 90x151 ft., rein. conc., elevators, slag roof, incinerator, elec. refrigerators, vapor heat.

N. C., Charlotte—Dowd Investment Co., Frank Dowd, Pres., Commercial Bank Bldg., remodel 3-story Dowd Apts., E. Morehead St. and South Blvd.; \$30,000; work start at once by subcontract.

Miscellaneous

Ark., Little Rock—Little Rock Baseball Association, H. Grady Manning, Sec., Marion Hotel, let contract to McGregor & Pickett, A. O. U. W. Bldg., for \$50,000 grandstand and bleachers, Fair Park; conc. and steel; Thompson, Sanders & Ginocchio, Archts., Hall Bldg. 9-24

Okla., Enid—General Development & Shares Corp. let contract to W. E. Krumvior for \$125,000 Enid City Market, 300 block E. Main St.; steel and rein. conc., 1 story, 22x150 ft., tile and conc. floors and foundation, built-up flat roof, marble, metal ceilings, metal doors, plaster board, steel sash and trim, hollow tile, terra cotta trim, ventilators, wire glass; Blumenauer & Associates, Archts., all Broadway Tower.

Schools

Ala., Tuskegee—Architectural Cast-Stone Co., 919 N. Court St., Montgomery, has stone contract for \$200,000 library; Taylor & Persley, School Archts.; Fosdick & Hilmer, Mech. Engrs., Union Trust Bldg., Cincinnati, O.; T. C. Windham & Son, Contrs., 1620 Fourth St., N., Birmingham, Ala. 6-11

Ark., Jonesboro—Following subcontracts let on administration bldg., A. & M. College: Millwork, Standard Lumber Co., 407 E. Fifth St., Pine Bluff, Ark.; plastering and lathing, Taylor & Forbes, Texarkana, Ark.-Tex.; marble, tile, slate and vitrolite, Southwestern Marble & Tile Co.; rein. steel, Capital Steel Co., Gazette Bldg.; cut stone, Hilliard Bros., Eighth and Fletcher Sts.; struc. misc. and orna. steel, Arkansas Foundry Co., 1500 E. Sixth St., all Little Rock; terrazzo, W. J. Northcross Mantel & Grate Co., 411 Madison St., Memphis, Tenn.; painting, Lee Savage Paint & Glass Co., Inc., 312 E. McDaniel St.; roofing and sheet metal, Rasdal Ricks, 318 Booneville St., both Springfield, Mo.; Estes W. Mann, Cotton Exch. Bldg., Memphis, Tenn., and Peter & McAninch, Inc., Pyramid Life Bldg., Little Rock, architects; J. H. Reddick, Contr., Kennedy Bldg., Fort Smith, Ark. 8-6

D. C., Washington—Ingalls Iron Works, Verona, Pa., and Concrete Steel Co., 2 Park Ave., New York, reported, have contract for 100 tons struc. steel shapes for \$147,500 addition and improvements to Paul Junior High School; A. L. Harris, Municipal Archt., Dist. Bldg.; A. Lloyd Goode, Inc., Contr., 11 E. Fifth St., Charlotte, N. C. 9-10

D. C., Washington—Following subcontracts let on \$200,000 addition to MacFarland Junior High School: Excavating, General Hauling & Excavating Co.; ready mixed conc., Super Concrete Corp., 3046 K St., N. W.; rein. steel, Rosslyn Steel & Cement Co., 3031 K St., N. W.; granite and limestone, R. B. Phelps Stone Co., Ninth and Douglas Sts., N. E.; plastering, Murray Bros., Dist. Natl. Bk. Bldg.; sheet metal work, Cavanagh & Kendrick, 3271 M St., N. W.; built-up roofing, Warren-Ehret Co., 3264 K St., N. W.; glass and glazing, Pittsburgh Plate Glass Co., Fourth and Channing Sts., N. E.; finishing hardware, Rudolph & West, 1332 N. Y. Ave., N. W.; painting, E. W. Minte Co., 1213 12th St., N. W.; plumbing, heating and ventilating, Standard Engineering Co., 2129 I St., N. W.; elec. work, L. T. Washington, 1486 Madison Place, N. W.; struc. steel erection, McDonald Steel Erecting Co., Inc., 356 L St., S. W.; orna. iron, Washington Stair & Ornamental Iron Works, 2014 Fifth St., N. E., all Washington; struc. steel, Dietrich Bros., 220 E. Pleasant St.; brick work, Joseph L. Booze & Co., 12 W. Madison St., both Baltimore, Md.; millwork, Watsonstown Door & Sash Co., Watonsontown, Pa.; architectural terra cotta, O. W. Ketcham, 125 N. 18th St.; tile and terrazzo, American Tile & Terrazzo Co., 1812 Chestnut St., both Philadelphia, Pa.; A. L. Harris, Municipal Archt., Dist. Bldg., Washington; Lee Paschall, Contr., Amer. Natl. Bk. Bldg., Richmond, Va. 9-10

N. C., Newton—Catawba County Bd. of Education let contract to J. H. Bolch for annex to Blackburn school; Martin L. Hampton, Archt., both Hickory. 10-6

Okla., Enid—Additional subcontracts let on 2 wards and hospital addition, State Institute for Feeble Minded, on which foundations and first floor slab are finished on one ward, foundations poured on other ward, and brick work started on hospital addition: Plumbing and heating, John L. Swafford Heating Co., 19 W. Dewey St.; roofing and sheet metal, John R. West Roofing Co., 1006 W. Mann St.; cut stone, O. K. Cut Stone Co., 716 W. Second St.; rein. steel and misc. iron, Capitol Steel & Iron Co., 1726 S. Agnew St.; metal doors, Bissell Builders Supply Co., Colcord Bldg., all Oklahoma City; rubber tile, Carl Graham Co., Wichita, Kan.; lumber, W. R. Thompson & Sons Lumber Co.; millwork, Thorne Planing Mill Co. and United Sash & Door Co.; painting, Dusky & Stephenson; brick, Palmer Brick & Tile Co., all Enid; terrazzo, Tulsa Terrazzo & Mosaic Co., 424 E. Ninth St., Tulsa; brick labor contract, M. Petersen, Elk City; Layton, Hicks & Forsyth, Archts., Braniff Bldg.; Brown & Myers, Engrs., Petroleum Bldg., all Oklahoma City; McMillen Construction Co., Contr., Broadway Tower Bldg. 9-24

Tex., College Station—Alamo Iron Works, 130 Santa Clara St., San Antonio, has rein. steel contract (lately noted struc. steel) for \$350,000 chemistry bldg., A. & M. College; separate bids for struc. steel, etc.; conc. work under way; Prof. F. E. Giesecke, College Archt., College Station; L. D. Royer, Mech. Engr., Smith-Young Tower, San Antonio; owner builds; Will A. Orth, College Station, in charge of constr. 10-8

Stores

Fla., Bushnell—Getzen-Smith Properties, Inc., erecting store and hotel bldg.; 3 stores, 16 hotel rooms and 8 baths; plans and constr. by owner.

Ga., Atlanta—Virgil Collier, 205 Peachtree Circle, and Roy Collier, 3850 Peachtree Rd., N. W., and Miss Lula Collier erect 3-story and basement store bldg., Peachtree and Ellis Sts.; foundation to permit additional stories; \$200,000 or more; 104x90 ft., 5 stories; Pringle & Smith, Archts., Norris Bldg.; Barge-Thompson Co., Contr., 136 Ellis St., N. E.

Md., Towson, Baltimore—Continental Contracting Co., 2508 N. Charles St., let contract at about \$12,000 to C. L. Kern, 612 McCabe Ave., for store; brick, 1 story, 30x90 ft.; Bernard Evander, Archt., 20 E. Lexington St.

Mo., St. Louis—M. Jost erect \$25,000 stores and tenements, 5003 Mardeland, 3715-21 Morganford Sts.; brick, 2 stories, 50x92 ft., asphalt roof, steam heat; total \$25,000; Louis C. Scatizzi, Archt.-Contr., all 1010 Chestnut St.

Necessary Public Work

Construction of 350 necessary bridges this winter at a cost of \$3,500,000 is Ohio's answer to the unemployment problem, according to O. W. Merrell, director of highways, Columbus. Governor White's relief bridge building program, he states, will provide work this winter for thousands of Ohio residents and will give the public earlier use of improvements at moderate cost because of present material prices. Bridge construction is particularly suitable during a period of unemployment, he points out, because "labor receives a greater share of the bridge-building dollar than for other highway activities in which machinery performs much of the work."

Surveys are under way and it is planned to let the 350 bridges in November and December. The program is planned in cooperation with the State relief committee and a list of unemployed will be furnished the contractor by a committee in each community.

\$550,000 College Buildings

College Station, Tex.—Plans are being prepared for a \$350,000 chemistry building and a \$200,000 engineering shops building to be erected here by the A. & M. College. The former will be three stories and basement, of steel, concrete and brick, with stone trim. Will A. Orth, College Station, is in charge of construction and concrete work has started. Structural steel contract was awarded to the Alamo Iron Works, San Antonio. The engineering shops building will be three stories, of similar construction. F. E. Giesecke is the college architect.

WANT SECTION

THE CLASSIFICATIONS IN THIS SECTION ARE:

Machinery and Supplies	Building Materials and Equipment	Bids Asked
Under this heading are reported requests for data, prices and literature and information on machinery, supplies and miscellaneous materials of a wide variety.	This division comprises all classes and kinds of materials and equipment used in building and construction projects of every kind.	Includes bids asked by U. S. Government, States, districts, municipalities, firms and individuals for machinery, materials, supplies and construction work.
<i>Items in this department are published without charge and these columns are open for the publication of wants of all kinds relating to construction work, machinery, materials and supplies.</i>		

Machinery and Supplies

Bollers.—Machinery Record, Hackley Morrison (Mchy. Dealer), Mutual Bldg., Richmond, Va.—Wants prices and data on two 200-h. p., return tubular, 150 lb. working pressure, South Carolina delivery.

Engine (Gasoline).—Machinery Record, Hackley Morrison (Mchy. Dealer), Mutual Bldg., Richmond, Va.—Wants prices and data on 6x7, 4-cylinder crane gasoline engine.

Excelsior Cutting Machinery.—Maddox Foundry & Machine Co., Archer, Fla.—Wants prices and data from manufacturers of excelsior cutting machinery.

Loading Machinery.—Harrisonburg Building & Supply Co., Inc., Harrisonburg, Va.—Wants prices and data on loading machinery to handle crates approx. 48x36x32 in., weighing from 500 to 700 lb.; crates to be conveyed approx. 50 ft. each side of loading door, weighed and loaded into truck floor which is approx. 30 in. higher than floor of warehouse; also must be unloaded at freight station.

Metal-Working Machinery.—Miami Asphalt Products Co., Riverside Sta., P. O. Box 96, Miami, Fla.—Wants prices and data from manufacturers of machinery for working light sheet metal into drums for roofing asphalt, and other smaller containers.

Oil Refining Plant.—R. H. Knopp, 1144 S. Third St., Louisville, Ky.—Wants prices and data from manufacturers on small plant for refining crude oil, capacity approx. 600 bbl. per 24-hr. day.

Presses, Dies and Finishing Equipment.—Burton Machine Co., Chestnut and Middleton Sts., Norfolk, Va.—Wants prices and data on presses, dies and finishing equipment for use in manufacturing metal burial caskets.

Stapling Machines.—Henry Walke Co. (Mchy. Dealer), 407 Union St., Norfolk, Va.—Wants prices and data on 20 St. Joseph Iron Works Leader, or equal, foot power stapling machines; requests price and delivery, immediately by wire, stating conditions.

Machinery Record, Hackley Morrison (Mchy. Dealer), Mutual Bldg., Richmond, Va.—Wants prices and data on:

(1) **Bollers**—80 to 100 h. p., h. r. t., complete with usual fittings; 2 150 h. p., 150 lb., w. p. h. r. t.

(2) **Dryer**—Louisville, rotary steam tube, 6-ft. diam. x 30 to 35 ft. long, all complete with girth gear, rollers, driving gears, etc., first-class condition

(3) **Engine Generator**—350/400 kw., 3 phase, 60 cycle, 2300 volt, 200 r. p. m., complete with exciter and generator panel; shaft and bearings not required.

Crystal Springs Sand & Gravel Co., Box 26, Crystal Springs, Miss., wants following, second hand only:

- (1) **Belt Conveyor**
- (2) **Conveyor Equipment**
- (3) **Pipe**—8, 10 and 12-in.
- (4) **Pumps**—8, 10 and 12-in.
- (5) **Screens**
- (6) **Screen Cloth.**

Miscellaneous

Incandescent Lamp Parts.—J. E. Bumgarner, 613 Julia St., New Orleans, La.—Wants prices and data from manufacturers of tungsten used as flaming element in incandescent, or flashlight lamps; also on incandescent tungstite and tungsten wire used in smaller light globes only, tungstic acid, etc.

Level (Architects' or Builders').—E. E. Burruss, 710 National Bank Bldg., Charlottesville, Va.—Wants prices and data on architects' or builders' level with extension tripod.

Steam Pump (Heating System).—F. L. Seeley, Asheville, N. C.—Wants prices and data on used Marsh or Worthington steam vacuum pump for heating system, approx. 6x8x12.

Thermometers.—Sterile Irrigator Corp., 515 E. Main St., Richmond, Va.—Wants prices and data from manufacturers on standard thermometers, in lots of 1000 or more.

D. B. Gibson, 1522 N. 36th Pl., Birmingham, Ala.—Wants prices and data on follow-

ing from manufacturers, particularly those catering to chain store trade:

- (1) **Bells and Buzzers**
- (2) **Flashlights (Electric).**

Building Material and Equipment

Mendenhall's, Inc. (Bldg. Materials), etc., Ashe and Lewis Sts., Greensboro, N. C., wants prices and catalogs from manufacturers on:

Building Supplies.

National Investors, Inc., Col. George Banks, Geneva Park, Portsmouth, Va., expects to build number small homes; anxious to get in touch with contractors in position to furnish plans and prices.

Bids Asked

Automobile.—Div. of Purchase, Sales and Traffic, Dept. of Agriculture, Washington, D. C.—Bids Oct. 20 for automobile for New Orleans.

Aviation Lighting.—Chief, Bureau of Yards and Docks, Navy Dept., Washington, D. C.—Bids Oct. 21 for struc. steel beacon tower and obstacle, boundary, flood and beacon lights at naval reserve aviation base, Miami (Opa Locka), Fla.

Boat.—U. S. Coast Guard Headquarters, Washington, D. C.—Bids Oct. 30 for constructing U. S. Coast Guard cutter No. 55, hull of steel, 165 ft. long, 36-ft. beam, 21 ft. deep, 13-ft. draft, 960 tons displacement, geared turbine drive, 1500 shaft h. p.

Bridge Materials.—Frank J. McAndrew, City Clk., Clarksburg, W. Va.—Bids Oct. 20 for 2257 lin. ft. 14 in. I-beams at 30 lb. per lin. ft., 2700 anchor plates, 5400 D. P. nails, 4 nail tools, 5050 lin. ft. steel traffic plates, 12,000 lag screws, 2500 carriage bolts, 2500 cut washers.

Dikes.—Missouri. See Construction News—Miscellaneous Construction.

Dredging.—Texas. See Construction News—Drainage, Dredging and Irrigation.

Dredging.—Galveston, Tex. See Construction News—Drainage, Dredging and Irrigation.

Dredging.—Texas City, Tex. See Construction News—Drainage, Dredging and Irrigation.

Electric Distribution System.—Office Constructing Quartermaster, Fort Benning, Ga.—Bids Oct. 29 for constructing underground electric distribution system for 33 houses in hospital group.

Electric Lamps.—Arkansas Construction Comsn., Tom Davis, Sec., Room 207, Marion Hotel, Little Rock, Ark.—Bids Oct. 22 for 1600 electric lamps for farm colony, State Hospital for Nervous Diseases, Saline County.

Elevator.—Supvg. Archt., Treasury Dept., Washington, D. C.—Bids Oct. 29 for elevator plant, U. S. post office, court house, etc., Greensboro, N. C.

Fire Hose.—U. S. Property & Disbursing Officer, Militia Bureau, 43 Jackson Barracks, New Orleans, La.—Bids Oct. 26 for fire hose at Camp Beauregard, La.

Fuel Oil.—Panama Canal, Office of Gen. Pur. Officer, Washington, D. C.—Bids Oct. 29 for fuel oil, for period beginning Dec. 15, 1931, ending Dec. 31, 1932.

Gasoline and Kerosene.—Panama Canal, Office of Gen. Pur. Officer, Washington, D. C.—Bids Oct. 26 for 150,000 gal. gasoline and 425,000 gal. kerosene, Cir. 2690.

Gasoline and Kerosene.—Panama Canal, Office of Gen. Pur. Officer, Washington, D. C.—Bids Oct. 26 for bulk ethyl gasoline and kerosene, Sch. 2690.

Gate Engine Repairs.—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 20 for repairing gate engines, Lock 14, Ohio River.

Hangars, etc.—Office of Q. M., Field Artillery School, Fort Sill, Okla.—Bids Oct. 30 for constructing air corps double hangars with annexes and boiler house annex.

Hydrants.—Dist. Commrs., Dist. Bldg., Washington, D. C.—Bids Oct. 27 for fire hydrants.

Lawn Sprinkling System, etc.—Treasury Dept., Office of Supvg. Archt., Washington, D. C.—Bids Oct. 30 for lawn sprinkling, hydrants and water piping system for Square 226, bounded by Pennsylvania Ave., 14th, 15th and E Sts., N. W., Washington.

Levee.—Helena, Ark. See Construction News—Miscellaneous Construction.

Needle Flats.—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 26 for needle flats for operation and care of canals and other works of navigation, indefinite, Locks 14 to 28, Ohio River.

Painting.—Supvg. Archt., Treasury Dept., Washington, D. C.—Bids Oct. 21 for painting plaster, post office, Corinth, Miss.; also painting plaster, Corsicana, Tex.

Panelboards and Steel Cabinets.—Panama Canal, Office Gen. Pur. Officer, Washington, D. C.—Bids Oct. 19 for panelboards and steel cabinets, Sch. 2692.

Pump.—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 21 for gasoline hand pump for U. S. Lock 22, Ohio River.

Pump.—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 21 for motor driven gear pump, U. S. towboat "Kanawha," P. R. L. (repairs).

Ranges (Kerosene and Coal).—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 23 for kerosene and coal ranges for Locks 27 and 28, Ohio River.

Ranges (Electric).—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 20 for electric ranges for Locks 26, 27 and 28, Ohio River.

Refrigerators.—Quartermaster, Fort Monroe, Va.—Bids Oct. 21 for 6 ice cooled refrigerators, 100-lb. capacity.

Ring Buoys.—U. S. Engr. Office, Huntington, W. Va.—Bids Oct. 19 for ring buoys, solid cork, canvas-cover, with handlines.

Road Materials.—State Highway Dept., Ben M. Sawyer, Ch. Highway Commr., Columbia, S. C.—Bids Oct. 19 for coarse and fine aggregate for bitum. surfacing.

Roads.—State Highway Dept., Dover, Del.—Bids Nov. 10 for 11 road and bridge projects: Cont. 176, Dagsboro-Shaftox, 5.57 mi. grading, 11,500 cu. yd. excavation, 14,000 cu. yd. borrow, 20,000 lb. reinforcement, 600 lin. ft. 15 lin. corr. m. pipe, 1800 lin. ft. r. c. pipe; Cont. 177, Georgetown-Springfield N. Rds., 4.1 mi. graveling, 8500 cu. yd. excavation, 200 cu. yd. borrow, 9000 cu. yd. gravel surfacing, 3000 lb. reinforcement, 400 lin. ft. corr. m. pipe, 490 lin. ft. r. c. pipe; Cont. 194, Frankford-Roxana, 3.83 mi. traffic bound slag, 7800 cu. yd. excavation, 800 cu. yd. borrow, 4000 tons traffic bound crushed slag surface course, 50 cu. yd. A conc., 4000 lb. reinforcement, 600 lin. ft. corr. m. pipe, 1150 lin. ft. r. c. pipe, 600 lin. ft. wire cable guard rail; Cont. 209, Farnhurst to Wilmington, 2.6 mi. dual highway grading, 110,000 cu. yd. excavation, 200 cu. yd. A conc., 10,000 lb. reinforcement, 3000 lb. catch basin and drop inlet castings, 200 lin. ft. corr. m. pipe, 2500 lin. ft. r. c. pipe, 1000 lin. ft. timber test piling, 5 m. ft. b. m. sheet piling; Cont. 210, Hollyoak-Claymont, Philadelphia Pike, 6500 ft. sidewalk, 1000 cu. yd. excavation, 33,000 sq. ft. cement conc. sidewalk, 1000 lb. catch basin and drop inlet castings, 600 lin. ft. 15 in. t. c. sewer; Cont. 211, Camden-Camp Meeting Woods, 2720 ft. sidewalk, 1000 cu. yd. excavation, 14,000 sq. ft. cement conc. sidewalk, 800 lb. catch basin and drop inlet castings, 50 lin. ft. t. c. pipe; Cont. 212, Clayton-Smyrna, 4300 ft. sidewalk, 1400 cu. yd. excavation, 22,000 sq. ft. cement conc. sidewalk, 1000 lb. catch basin and drop inlet castings, 80 lin. ft. t. c. pipe; Cont. 213, Blades-Seaford Town Lines, 1025 ft. sidewalk, 200 cu. yd. excavation, 5200 sq. ft. cement conc. sidewalk, 1200 lb. catch basin and drop inlet castings, 200 lin. ft. t. c. pipe; Cont. 214, Millsboro towards Harmon School, 1600 ft. sidewalk, 400 cu. yd. excavation, 8000 sq. ft. cement conc. sidewalk, 1000 lb. catch basin and drop inlet castings, 100 lin.



46 miles of DELAUDAUD PIPE are in use for gas and water mains

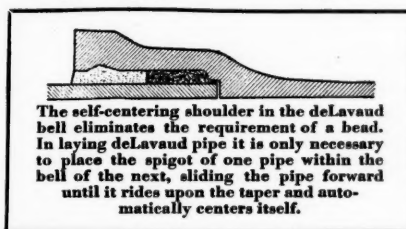
The progressive spirit of Springfield, Massachusetts is exemplified by a beautiful civic center with a magnificent campanile tower. Springfield's progressiveness is also evidenced by its gas and water systems for which 46 miles of deLavaud pipe have been specified and laid.

For deLavaud pipe is the strongest pipe ever cast. It is a tough pipe too. The metal is dense and fine-grained — remarkably free from slag, blow holes and weakening impurities. Tests conducted by disinterested testing laboratories

have proved that deLavaud pipe is at least 25% stronger than good pit cast pipe.

DeLavaud pipe is produced by pouring molten iron into a rapidly revolving cylindrical mold. Centrifugal force holds the metal against the sides of the mold and drives out impurities with a force many times greater than gravity. DeLavaud pipe

is a modern pipe for modern conditions and present-day high-pressures. Ask us for facts and figures. The new deLavaud Handbook gives detailed information. Write for a free copy today.



The self-centering shoulder in the deLavaud bell eliminates the requirement of a lead. In laying deLavaud pipe it is only necessary to place the spigot of one pipe within the bell of the next, sliding the pipe forward until it rides upon the taper and automatically centers itself.

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ft. t. c. pipe; Cont. 215. Barkers Landing Causeway, 300 ft., 250,000 cu. yd. borrow; Cont. M-B-1, painting bascule bridge over Christiana River, S. Market St., Wilmington.

Roads.—State of Maryland, 8 roads. See Construction News—Roads, Streets and Paving.

Sewer Construction.—Commrs. Sewerage, Louisville, Ky., Frank D. Rash, Acting Chmn., Woolsey M. Caye, Tech. Engr.—Bids Oct. 27 for constructing Montana Ave. Sewer, Sect. B, Contr. No. 61: Work includes: 4180 ft. 4 ft. 9-in. x 7 ft. 1½ in. inverted egg rein. sewer; 580 ft. of 54-in. circ. rein. conc. sewer; junction chamber, relief structures, manholes, etc.; approx. quantities, 4760 ft. of earth excavation in open trench; 2540 cu. yds. rein. conc.; 421,000 lbs. steel rein. bars.

Sewers.—Supvg. Archt., Treasury Dept., Washington, D. C.—Bids Oct. 29 for changes in sewers, U. S. post office, Greenville, S. C.

Sterilizing and Kitchen Equipment.—Constructing Quartermaster, Langley Field, Hampton, Va.—Bids Oct. 29 for manufacturing and furnishing or manufacturing, furnishing and installing sterilizing and kitchen equipment for Post Hospital, Langley Field.

Streets.—Baltimore, Md. See Construction News—Roads, Streets and Paving.

Tent Floors.—U. S. Property and Disbursing Officer, Militia Bureau, 43 Jackson Barracks, New Orleans, La.—Bids Oct. 26 for 310 tent floors.

Thermometers (Recording).—Marine Corps, Q. M. Dept., Washington, D. C.—Bids Oct. 21 for 2 recording thermometers, delivery Norfolk, Va.

Tie Plates.—Office of Chief of Engrs., 2732 Munitions Bldg., Washington, D. C.—Bids Oct. 22 for tie plates with braces for use with 70-lb. A. S. C. E. rail.

Water and Sewer.—War Dept., Construction Service, Q. M. C., Office of Constructing Q. M., Langley Field, Va.—Bids Nov. 9 for municipal water and sewer lines for 20 double N. C. O. quarters, barracks and service club building.

Water Cooler.—Custodian, U. S. Post Office, Newberry, S. C.—Bids Oct. 30 for electric water cooler.

Water Piping, etc.—Treasury Dept., Office of Supvg. Archt., Washington, D. C.—Bids Nov. 6 for new brass water piping, etc., U. S. post office, Sharon, Pa.

Water Works.—City of Corpus Christi, Tex., Edw. F. Flato, Mayor, Robt. J. Cummins and Henry E. Elrod, 1105 Nixon Bldg., Houston, Consol. Engrs.—Bids Oct. 29 for rehabilitation of dam on Lake Lovenskiold near La Fruta; separate bids received for construction and for mechanical flow control equipment.

Bureau of Supplies and Accounts, Navy Dept., Washington, D. C.—Bids Oct. 27 for:

Typesetting Machine
Lathe (Engine)—motor driven.
Procurement Div., Veterans' Administration, Washington, D. C.—Bids until dates indicated for:

Cooks' Tables—5, Oct. 20
Gas Range—2-section, Oct. 20
Automobile—2, sedan type, Oct. 20
Electric Ranges—2, Oct. 26
Oak Shelving—5 ranges, Oct. 30
Extractor—Oct. 21
Presses—2, Oct. 21
Air Compressor—Oct. 21
Fire Engine and Hose Carts—4, 500-gal. combination, Oct. 21
China ware—approx. 100,000 pieces, Oct. 30
Tumblers—120,000, Oct. 30.

Trade Literature

Virginia.—As a feature of the autumn number of "Virginia, First in the Heart of the Nation," pictorial magazine issued by the Virginia State Chamber of Commerce, Richmond, fifty of the finest pictures from the files of Brady, leading photographer of the War Between the States, have been reproduced. This issue also features winter sports in Virginia and devotes pages of pictures to hunting. Other pictures include those of Yorktown and its Sesquicentennial; Chincoteague Island and its famous pony roundups; latest ship launched by the Newport News Shipbuilding and Dry Dock Company; memorials at Alexandria; apple harvest time around Winchester; harvest time in Southwest Virginia; Natural Tunnel of Virginia, and others. Through special arrangement with the War Department, historically valuable pictures of Virginia scenes have been reproduced.

South Carolina's New Era.—This is the title and general content of a booklet issued by the State of South Carolina through the South Carolina Natural Resources Commission, Columbia, outlining briefly the growth of the state and pointing to its larger opportunities. Other subjects are: A Birdseye View of Progress, State System of Highways, Dairying and Stock Raising, The Trucking Industry, Water Power Development, Manufacturing Development, Mineral Resources, Value of Railways, Winter and Summer Resorts, and Educational Advantages. Statistics are presented on the iodine content of some South Carolina vegetables, fruits, sea food and milk.

For Making Tee Joints.—The Bonney Forge and Tool Works, Allentown, Pa., are distributing a booklet illustrating and describing Bonney drop forged Weldolets and Thredolets, specifically designed to make Tee joints easily, quickly and economically. The products are individual fittings, designed to be installed by welding to the main line, using a fusion or Vee weld, then removing the button and completing the junction by welding or screwing the branch pipe to the outlet of the fittings.

Industrial Railways.—The American Car and Foundry Company, New York, has issued Bulletin 102, superseding Bulletin 101. It is devoted to A. C. F. Industrial Railways, including cars and other equipment. Illustrations present a brief pictorial summary or classification of the A. C. F. line and indicate in a general way its broad scope. The company has Southern plants at Huntington, W. Va., St. Charles, Mo., and St. Louis, and Southern offices at Huntington and St. Louis.

Snow Plows.—Bulletin W-31-K, a new publication of the Austin-Western Road Machinery Company, Chicago, is devoted to Western Snow Plows, made by the Western Wheeled Scraper Company, Aurora, Ill. The plows are manufactured in both straight blade and V-shaped types, the latter being furnished either with or without wings. Page two of the bulletin outlines all equipment illustrated and on the last page specifications are presented.

Merchants' Year Book.—The 1931 Year Book of the Merchants' Association of New York, just published, presents a selective alphabetical and classified compilation of prominent concerns in the trade industries and professions. Names listed cover the membership of the association as of September 2, approximately 6000, and include individuals, firms and corporations.

"Bank Management"

The intent of Professor J. Franklin Ebersole of Harvard University to provide present and prospective bank managers with factual illustrations of major problems in bank administration is well fulfilled in his work, "Bank Management—a Case Book," published by the McGraw-Hill Book Company, Inc.; \$5. The book is one of a series in Harvard Problem Books.

In belief that the crux of efficient banking is the making of sound loans and investments, Professor Ebersole has emphasized the various types of advances. The value of the work is enhanced by the fact that it is practical, rather than theoretical; instances are taken from actual banking experiences, with changes of names and dates and data to protect the identity of interests whose cases are cited.

INDUSTRIAL NEWS

Acquires Hand Sprayer Business

The Electric Sprayit Company, South Bend, Ind., has purchased the hand sprayer business, stock and equipment of the G-V Sprayer Company, which had plants at Wichita, Kan., and Lebanon, Tenn. The new hand-sprayer division will be consolidated with the company's power-sprayer division at South Bend. The acquisition of this line of G-V continuous-variable hand sprayers is a step in the expansion program of the Electric Sprayit Company to better serve requirements of customers for spraying equipment of regular and special design.

M-K-T Industrial Engineer

Officials of the Missouri-Kansas-Texas lines, feeling that an "experienced engineer can be of invaluable assistance to contractors, building and road material dealers and to manufacturers who are actual or potential patrons of the railroads," have created the position of "industrial engineer," according to A. E. Gilman, manager of industrial development of the road. N. W. Brown of St. Louis, assistant engineer in the office of Chief Engineer F. Ringer, has been appointed to the new position, the duties to embrace activities connected with traffic solicitation, as well as engineering services connected with industrial tracks and locations. Mr. Brown's office will also make a survey of raw materials local to Katy lines available for development.

Joins Timken Organization

F. J. Griffiths has been elected director and president of the Timken Steel & Tube Company, Canton, O., and M. T. Lothrop, president of the Timken Roller Bearing Company, has been made chairman of the board of Timken Steel & Tube. Until recently, Mr. Griffiths was associated with the Republic Steel Corporation as president of the Republic Research Corporation.

New Orleans Dry Docks Offered

By order of the Todd Engineering Dry Dock & Repair Co., Inc., New Orleans, owners, I. B. Rennyson, auctioneer, New Orleans, will offer at public auction October 28, on the premises, machinery and equipment of the Jahncke Dry Docks, Inc., St. Maurice avenue and Bienvenue street, New Orleans. The sale will include lathes, shapers, radial drill presses and planers, grinders, hammers, forming rolls, punches and shears, radial post drills, portable welding outfits, tinsmith and wood-working machine tools, motors, vises, electric cranes, locomotive cranes, air compressors, generator sets, presses, power cold saws, mast and boom turning lathes, belting, etc.

(Continued on page 50)

With Well Points there's No Substitute for



LABOUR PUMPS come through with flying colors when used for dewatering through well points. The patented LaBour principle enables these simple centrifugal pumps to equal positive displacement pumps in the ability to produce vacuum.

With but one moving part and with ample clearances, LaBour Pumps provide the rugged simplicity which assures dependable, trouble-free operation. These pumps will handle dirty water and they retain their effectiveness even after considerable wear.

LaBour Pumps handle air when and as it comes to the suction opening, all without the use of valves, floats or other auxiliary apparatus. Unusually high efficiency is attained by LaBour Pumps, despite the fact

that they are of the open impeller type and thus less likely to have trouble. The illustration on this page shows a LaBour Pump used by George H. Flynn in subway construction work in New York City. A long line of well points, plus a fairly high discharge head, makes this as severe a test as can be applied to a pump for contractor's use. That LaBour has passed this and hundreds of similar tests is demonstrated by the fact that this same contractor has whole batteries of LaBour Pumps on this and other projects.

Let us send you full information about the LaBour line and an explanation of the simple mechanical and hydraulic principles which are used to accomplish these outstanding results.

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LA BOUR PUMPS

NEVER LAY DOWN ON THE JOB

(Continued from page 48)

General Manager of Railroad

The appointment has been announced of John Farrington as general manager of the Fort Worth and Denver City Railway, with headquarters in Fort Worth, to succeed James H. Aydelott, who becomes general manager of the Burlington lines west of the Mississippi River, with headquarters at Omaha, Neb. Mr. Farrington has been with the Burlington system for 25 years.

10,000,000 Cubic-Foot Gas Holder

Contract for a 10,000,000 cubic-foot capacity five-lift, water-sealed gas holder has been awarded to the McClintic-Marshall Corporation, Bethlehem, Pa., by the Philadelphia Gas Works. Fabrication is under way and erection will be started in November, with a view to completing the work early in 1932.

The Peden Steel Company

The Peden Steel Company, a new enterprise with an engineering office at 512 West Hargett street, Raleigh, N. C., will continue one of Raleigh's oldest steel industries. James M. Peden, who heads the new company, recently purchased the complete stock of the structural steel division of the bankrupt Raleigh Iron Works, and his new firm is now operating a structural steel fabricating shop in conjunction with an ornamental iron shop and blacksmith shop. The company also has installed modern equipment for electric and acetylene welding, and furnishes warehouse service on merchant and reinforcing bars, sheets, structural steel shapes, brass and iron castings and building specialties. The staff of the Peden company includes W. C. Fitzgerald, engineer; J. K. Knight, shop foreman, and J. C. Holland, welder. Mr. Peden was manager of the structural steel division of the Raleigh Iron Works for seven years, and Mr. Fitzgerald has been associated with him for six years.

English Type Village

The Interstate Properties Corporation, 551 Fifth avenue, New York, plans to convert Hillsdale on Gwynn's Falls, Baltimore, into an English type village, which will be self-sustaining as far as markets, stores, schools, churches and other facilities are concerned. Work is expected to start at once in preparation for the construction of various buildings. In addition to properties not improved, the company has procured about 120 dwellings of stone and frame, which will be razed for the new development. Interests identified with the company include Roberts S. Harnsberger and Stephen N. Bobo, both of New York; David A. Buckley, Jr., attorney of New York and Washington, and C. A. Heitman, treasurer of A. H. Bull Steamship Co., New York. Philip S. Morgan & Co., Baltimore, are agents for the company. Lawrence A. Sangston, New York, is the architect and construction will be handled by the owners. The complete development will involve about \$4,000,000, it is estimated.

Contractors Estimating on River Lock

Marmet, W. Va.—Bids will be opened October 23 in the U. S. Engineer Office, Huntington, W. Va., for building the second of the twin Marmet Locks (Lock B) in the Great Kanawha River. The lock will be located on the right bank of the river, near Marmet and about 9 miles above Charleston, W. Va. Construction will embrace land and guide walls, sills for lock gates and emergency dams, Stoney gate valves with operating machinery for the land wall only, mitring gates with operating jacks and machinery complete for both sides of the lock; oil, water and gas piping and electric conduits, metal work and incidental construction. It will include also the construction of a temporary timber-crib dam extending from the lower end of the lower guard wall of the riverward lock to and across the Chanoine weir of existing dam No. 5 below; removal of a section of this weir between the temporary

crib dam and the abutment at the end of the weir; dredging channel for the lower approach to the new locks; removal of existing cofferdam, and the possible construction, maintenance and removal of an auxiliary cofferdam near the lower end of the intermediate lock wall. Construction of a concrete powerhouse to be built on the top of the river wall of Lock A will also be included. Lock A, the riverward lock, is now under construction under another contract, and the major portion is expected to be completed by January 1, 1932.

Specifications have been furnished the following contractors for bids: Hardie-Tynes Manufacturing Co., Birmingham, Ala.; L. E. Meyers Construction Co., New York; Maxon Construction Co., Dayton, Ohio; West Virginia Sand & Gravel Co., Charleston, W. Va.; Dravo Contracting Co., General Contracting Corporation, Booth and Flinn Company and the P. B. Reinhold Company, all of Pittsburgh, Pa.; the Merritt-Chapman & Scott Corporation, Baltimore, Md.; A. Phelps & Sons, Detroit, Mich., and Foot Bros. Gear & Machine Co., Chicago, Ill.

Florida Realtors Urge Construction

The Florida Association of Real Estate Boards has assumed sponsorship of Florida Home Improvement Week, October 25 to 31, the purposes of the campaign being: To provide employment in home construction, repairs and betterments; to get properties in shape for sale, rent or greater comfort; to stimulate home building and home buying, to the advantage of all business. Cooperation by the National Organization for Unemployment Relief, the National Clean Up and Paint Up organization, and Better Homes in America, all of Washington, D. C., has been assured to Paul O. Meredith, executive secretary of the state realty organization, with headquarters at Orlando.

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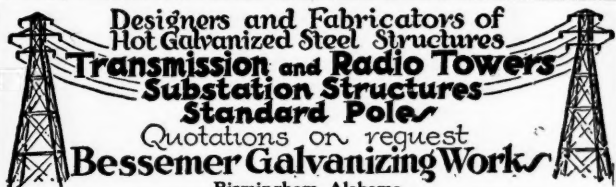
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Security of the Farm Emphasized

"People with money to invest could not do better right now, I believe, than buy 6-cent cotton and \$8-to-\$10-an-acre farm land, and then forget either or both," declared Dr. W. W. Long, director of the Clemson College Extension Service, in a recent interview. "You can put this down as a law of nature: The sales value of no single thing is going to stay under its real worth durably, or, as time goes, long."

The South Carolina Bankers Association further quotes from Dr. Long's interview as follows:

"Take the Carolinas, particularly South Carolina, and farming right now. In my 18 years of close contact with agricultural conditions in this section, I have never known Carolina farmers as a whole to have more in their possession than at the present time. I don't mean money; I mean things. Crops are excellent, harvests will be huge. A hundred years ago, when mere money counted for little in farming, the present state of affairs would have been considered unusually good. People thought then in terms of things, of which we now have exceptional plenitude.

"Although still too dependent on cotton, the South Carolina farmer is not nearly as dependent on it as he used to be. Five years ago scarcely a hog was shipped out of the state. Last year 500 carloads went out and yielded profits. More than that probably will go out this year, yielding fair returns for the corn and beans fed. Ten years ago only about 1000 acres of land was in soy beans in South Carolina. Now there are close to 100,000 acres, which means soil improvement and inevitable livestock farming on a parity with cotton. Ten years ago almost no sweet potatoes were going from the state; now hundreds of Carolina farmers make money on this product. Ten years ago dairying was a minor matter; now it is of major importance in several sections. The same is true of poultry and, in part, of fruits and of certain vegetable products like asparagus.

"I venture to say that 90 per cent of variety and specialty farmers in South Carolina have made money this year, not much on the average, perhaps, but enough to spell progress. Also, the average general farmer who has operated on well-balanced diversified lines is at least coming out even and has enough by way of invisible gains, such as soil improvement and livestock increase, to balance the books in his favor.

"Glance at certain reflections of fundamentals. You don't hear of unemployment problems in rural communities; folk on the land can do something at all times. The occupational tide has been toward agriculture the last year or two, for the first time in over 20 years. This shows that in the long run farming is the most secure and depression-proof of occupational endeavor.

"The most independent and secure people in the world right now are those Southern farmers who own their land, have adequate equipment paid for, a fair

complement of livestock and sufficiencies of home-grown food and feedstuffs.

"Farmers will pull out of the present situation more quickly probably than other business men will be able to do. Many an agricultural beginner will lay the foundations of a happy and successful life by taking advantage of present conditions to drive his stakes deeply into the soil. Many a present big land owner did that back in the nineties when conditions were much as they are now. It will be almost impossible to lose money on Carolina land that is bought now."

New Tax Sources

New taxes on utilities, tobacco, vending machines, advertising signs, incomes and intangibles; and increased taxes on some of these items in states that already tax them, mark the movement to find new sources for funds, reports the National Association of Real Estate Boards. The association has been actively urging that ways and means be found to relieve real property of the too-big tax burden it now carries.

Perhaps the most significant action from the standpoint of the taxpayer is the assurance of the State of North Carolina that real property assessment will be reduced by \$12,250,000. The state has abolished all county and local highway commissions and has taken over maintenance and control of all roads in the state. Schools hereafter are to be supported by the state mainly from sources other than real-estate taxation. Counties alone may levy a 15-cent tax on realty for this purpose.

Utah passed an income tax law at the last legislature. Income taxes have been increased in Missouri, Oklahoma and North Carolina. Wisconsin will tax incomes in future on a basis of the income over a one-year period instead of over a three-year period as heretofore. Last year in Oregon the tax on intangibles was held unconstitutional. This year the proposed tax was raised and passed. Kansas passed a five-mill tax on intangibles. Florida has a new tax for corporations.

Idaho, South Carolina and Vermont tax electric public utilities. New Hampshire taxes gas and electrical utilities. North Carolina has increased the tax rate on all utilities. Ohio has reduced its rate on railroads. North Dakota is taxing express companies, Wisconsin has increased the tax on telephone toll lines and exchanges, and 13 states have increased the tax on gas: Arizona, Arkansas, Kansas, Maine (pending a referendum), Massachusetts, Montana, North Carolina, North Dakota, Oklahoma, Tennessee, Utah, Washington and Wisconsin.

Ohio and Texas have a new tobacco tax, the money to go primarily to educa-

tion, thus relieve realty of this burdensome pretty much alone previously. Tobacco tax rates have been increased in Georgia and Arkansas. Arkansas and Nevada will now tax vending machines; Vermont and Maryland, advertising signs; Delaware, New Jersey and West Virginia will place new levies on boxing and wrestling. North Carolina has adopted a sales tax, a gross tax on wholesale and retail merchants; and a retail tax "society" has been organized in Indiana to educate the citizens on the value of such a tax.

Taxes on common carriers have been raised in several states, and motor vehicle registration fees have gone up in Florida, Illinois, Nebraska, New Mexico, Ohio, South Dakota and Wisconsin, with Idaho, Maine and Tennessee giving a slight reduction in such fees. Florida has increased the gasoline tax.

\$1,000,000 Power Line

St. Louis, Mo.—The Union Electric Light and Power Company, of this city, has authorized the Stone & Webster Engineering Corporation, Boston, Mass., to proceed with the design and construction of a second 132,000 volt transmission line from the 172,000-horsepower Osage hydro-electric plant nearing completion in central Missouri to the Page Avenue substation in St. Louis. This new line will be 136 miles long and is estimated to cost \$1,000,000. Except for steel towers at river and highway crossings and along railroad rights-of-way, the line will be of standard H-frame wood construction, and will follow the right-of-way of the first Osage-Page Avenue transmission line.

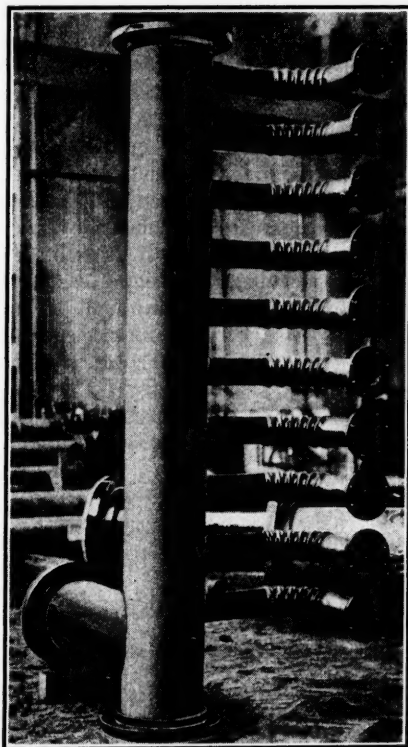
Fruit and Vegetables From a Florida County

Orange county, Florida, has exceeded its previous season-record for shipments of fruits and vegetables, the Orange County Chamber of Commerce reports, having shipped 9623 solid carloads of citrus fruits. In addition, the county shipped 1339 carloads of truck crops, including: Cabbage, 491; cucumbers, 153; lettuce, 120; beans, 64; peppers, 61; watermelons, 47; tomatoes, 41; celery, 34; strawberries, 11; eggplant, 1; and mixed vegetables, 316.

\$500,000 Hotel Bid Asked

Augusta, Ga.—Bids will be opened October 23 by H. P. Burum and associates for construction of a \$500,000 hotel here, for which Scroggs & Ewing, Augusta, are the architects. The building will be 16 stories and basement.

CREASED BENDS



The welded header assembly shown at the left consists of a 16" body over 11 feet long with one 16" and ten 5" flanged necks welded to it.

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FINANCIAL NEWS

Bond Issues Proposed

Ala., Mobile—City, Cecil F. Bates, Mayor, opens bids Oct. 20 for \$50,000, \$1000 denom., not to exceed 6% refunding bonds; also \$75,000, 5% airport bonds.

Ark., Texarkana—City, G. E. Vinson, Clk., opens bids Oct. 27 for \$10,000, 5% airport bonds. 8-27

Ark., Wynne—Wynne School Dist. voted \$20,000, 5½% school bonds.

Ga., Brunswick—City, Hugh Burford, City Sec. authorized by State Legislature to issue \$150,000 airport bonds. 7-30

Ky., Greenup—Greenup County Fiscal Court approved sale of \$75,000 bonds to take care of outstanding vouchers issued in 1929.

Ky., Versailles—City Council called election for Nov. 3 on \$50,000 water supply bonds.

La., Gretna—City, Mayor and Bd. of Aldermen, called election for Nov. 17 on \$200,000 paving bonds.

La., Ruston—City, Chas. C. Goyne, Mayor, did not sell \$180,000, % improvement bonds; probably reoffer later. 9-3

Md., St. Michaels—City, reported, will not issue electric plant bonds authorized by Legislature. 4-23

Miss., Starkville—City, Bd. of Aldermen, E. R. Lloyds, Mayor, called election for Oct. 31 on \$102,000 power plant bonds.

Mo., Jefferson City—State, Larry Brunk, State Treas., opens bids Nov. 3 for \$6,000, 4% road bonds. 10-8

Mo., Jefferson City—City Council may call special election on \$120,000 bonds.

Mo., St. Joseph—City Council may call election on \$300,000 improvement bonds.

N. C., Fayetteville—City votes Nov. 17 on \$65,000 bonds for terminals on Cape Fear River. 9-24

N. C., Greensboro—Local Government Comsn., Raleigh, reported, approved arrangements of city with Chase Harris Forbes Corp., New York, to arrange for sale of securities totaling \$3,000,000.

Okla., Calvin—City voted gas system bonds.

Okla., Pryor—City defeated power plant bonds. 10-1

S. C., Aiken—Aiken County authorized by Legislature to issue \$60,000 school district bonds.

S. C., Greenville—Greater Greenville Sewer Comsn., E. D. Fry, Supt., postponed sale of \$135,000 Augusta Head Sewer Dist. bonds until Spring. 6-25

Tenn., Dayton—Rhea County Court recently authorized \$275,000 refunding bonds.

Tenn., Lookout Mountain—City, Election Comm., called election for Oct. 20 on \$100,000 bonds for paying and funding outstanding indebtedness.

Tenn., Memphis—City, D. C. Miller, Clk., reported, opens bids Nov. 10 for \$270,000 assessment bonds. 9-24

Tex., Beaumont—City Comsn. approved issuance \$100,000 4½% refunding bonds.

Tex., Fort Worth—Tarrant County Water Control & Improvement Dist. No. 1, W. K. Stripling, Sec., 418 Capps Bldg., opens bids Oct. 28 for \$1,250,000 Series D bonds; int. rate to be fixed by purchasers.

Tex., Longview—Longview Independent School Dist., reported, voted \$175,000 school bonds.

Tex., McAllen—City Comsn. plans calling election late in November on \$201,000 refunding bonds.

Tex., Pelly—City, W. W. Green, Agt., Goose Creek, receiving bids for \$15,000, \$1000 denom., 6% coupon water and sewer bonds.

Tex., Rankin—City may vote on natural gas system bonds.

Tex., San Benito—City votes Nov. 3 on \$53,000, 5½% refunding bonds.

Tex., San Antonio—Bexar County Comms. Court and City Comsn., reported, plan election on \$2,000,000 road bonds.

Tex., Sherwood—Iron County Clk. advises no plans made for bond election. 10-1

Bond Issues Sold

Ga., Rome—Floyd County, reported, sold \$61,000, 6% refunding bonds to Roger H. Evans & Co., Dallas.

Ky., Maysville—City, reported, sold \$50,000 waterworks bonds to Prescott, Wright, Snider Co., Kansas City, as 5s, at par.

La., Crowley—Acadia Parish Road Dist. No. 4, reported, sold \$68,000, 5% road bonds to Lachlan M. Vass & Co., New Orleans.

Mo., Webster Groves, St. Louis—City, Maurice A. Mudd, Clk., recently sold \$100,000 city hall and fire station bonds to Smith, Moore & Co., St. Louis, as 4s, at 100.46.

Okla., Oklahoma City—Oklahoma County School Dist. No. 60 sold \$25,000 school bonds to C. Edgar Honnold, Oklahoma City.

Okla., Pawhuska—Osage County School Dist. No. 14, reported, sold \$15,000 school bonds to Taylor-White Co., Oklahoma City.

Tex., Abilene—City, reported, recently sold \$120,000, 5¼% refunding bonds to Ulen Securities Co., Dallas.

New Financial Corporations

Ark., Harrison—J. W. Bass and associates interested in establishing bank.

Tex., San Antonio—Russ, Roe & Co. formed by A. M. Russ and E. J. Roe, 510 W. Mistletoe St.; investment securities.

Va., South Boston—Mayor James B. Wilborn appointed R. S. Barbour, W. B. Settle, F. L. McKinney, J. S. McRae, W. H. Moseley and R. C. Overbey as committee on organizing bank.

First National Bank, Geo. W. Layman, Pres., and Farmers & Merchants' Bank, N. E. Spessard, Pres., both Newcastle, Va., plan merging.

First National Bank, August C. Richter, Pres., acquired First National Bank, Albert Martin, Pres., both Laredo, Tex.

State National Bank, I. N. Cerf, Pres., and First State Bank, Geo. E. Jester, Pres., both Corsicana, Tex., merged.

Citizens Bank, Drakesboro, Ky., reopened with E. H. Flanagan, Pres., and A. M. Neace, Cashier.

Furniture Plant Expanded

Toccoa, Ga.—Forrest Additon of Flowery Branch, Ga., who recently purchased the old Diana furniture plant here from Charles L. Von Dreele, Hoboken, N. J., has installed a new boiler and additional machinery for the manufacture of bedroom furniture, particularly patented Vanirobes. The Vanirobe, a new article of furniture, is said to combine the best features of a dresser, wardrobe, dressing table and chiffonette, and with a bed to match will make a two-piece bedroom suite. The enterprise will be known as the Additon Furniture Co. Mr. Additon will handle sales at Flowery Branch, while Wendell Morris, manager, and Eugene Jester, superintendent, will handle the manufacturing end at Toccoa.

The commissioners' court of Bexar County and the city commission of San Antonio, Tex., are cooperating in plans for calling a county-wide election on a \$2,000,000 bond issue for roads.

Mortgage Bankers to Meet

The eighteenth annual convention of the Mortgage Bankers Association of America will be held at Dallas, Tex., from October 27 to 29. The convention will deal with the future of mortgage banking, discussions having to do with business practices and legislative and economic affairs affecting borrowers, investors, banks and mortgage loan companies. General sessions will be held each morning and group sessions in the afternoons. A feature will be an address by S. F. Westbrook, vice-president of the Aetna Life Insurance Company, Hartford, Conn., on the subject of "Administration of Mortgage Loans and Lands from the Home Office Standpoint."

Texas Is Urged to Develop Its Resources

(From the Dallas Morning News)

Texas is a state in the American Union, but it is more than that. It is an empire in area, population and natural resources. Hard times have fallen on the world and many readjustments must be made. Texas has its share of misfortune through low prices and the consequent slackening of business conditions, but, unlike many other parts of the United States and Europe, this state has the remedy for its hard times in its own hands.

It seems clear that cotton is no longer king and that the South cannot hope to export much cotton in the future. But if King Cotton is dead, long live King Industry! Texas is fabulously rich in its resources and should begin definitely and systematically to live on its own in a larger way than ever before. It should aim to grow its own food supplies and live on them. It should aim to develop its own industries.

Every county and city should study its own situation carefully and see what can be done by way of turning cotton farmers into food growers and industrial workers, using county resources and home finances as much as possible. Texas money should be invested in Texas business, not to the exclusion of capital or products from other states, but in developing newer activities to take the place of the lessened production of cotton. Texas needs again the pioneer spirit to blaze a way through untried fields of potential industrial activities.

Why should Texas assume poverty and unemployment to be inevitable when Nature is so prodigal? This is a time of transition for Texas and Texans. We are about to turn away definitely from an undue devotion to cotton and raise our own foods and build our own industries.

WHITCOMB

cuts costs

saves time

for **VALENTINE SUGARS, INC.**

LIGHT tonnage to be hauled over a five mile distance presented a definite problem to Valentine Sugars, Inc., operators of one of the largest plantations and sugar houses in Louisiana.

Sugar, manufacturing supplies and general merchandise make up the materials to be moved. Use of a barge up and down Bayou La Forcho, from the Valentine properties to Lockport, cost little to operate, but this means of transportation made double handling necessary.

So that this expense could be avoided, Valentine and the Southern Pacific made an agreement; the railroad to build a short line, the company to operate its own locomotive.

A 25-ton mechanical drive Whitcomb was purchased to do the hauling. Here are the costs of operation:

—February 25, to August 1, 1931—

Gasoline consumption—645 gal. at 15c.....	\$96.75
Oil consumption—60 gal. at 44c.....	26.40
Grease consumption—80 lbs. at 7c.....	5.60
Incidentals	18.58
Crew wages, maintenance and labor.....	124.50
Total	\$271.83

The operation has included all car movements, spotting, switching and hauling; has required many one-car runs and many empty runs to the main line to pick up cars.



There is a type and size of Whitcomb Locomotive to effect substantial savings on any hauling job, and to do the job quickly, effortlessly, dependably.

THE WHITCOMB LOCOMOTIVE COMPANY

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WHITCOMB

LOCOMOTIVES

South Shares in Better Business in Certain Exports

Better business in certain American export lines in the first half of 1931 is emphasized in an analysis made by the Foreign Commerce Department of the Chamber of Commerce of the United States, which shows that 16 out of 99 leading American export items were shipped abroad in larger quantities in that period than in the same half of last year. Agricultural products figure prominently in the list of items making the gains.

The 16 items cited, with the percentage of increase, are as follows: Unmanufactured cotton, 8 per cent; furs, 3 per cent; leaf tobacco, 2 per cent; fresh apples, 133 per cent; oranges, 144 per cent; canned fruit, 17 per cent; rice, 11 per cent; prunes, 122 per cent; barley, 13 per cent; grapefruit, 63 per cent; raisins, 5 per cent; inedible animal oils

and greases, 33 per cent; old and scrap copper, 234 per cent; radio receiving sets, 101 per cent; camera films, 0.1 per cent; and broad silk, 1 per cent.

"These increases," the Chamber's report points out, "are all the more significant when it is considered that the total value of American exports for the first half of 1931 declined 36.6 per cent. Falling prices were responsible to a considerable extent for the decline, as the total quantity of exports, it is estimated, declined only 22 per cent.

"The 'Big Ten' of our export trade in the first half of this year were unmanufactured cotton, automobiles and parts, gasoline and naphtha, leaf tobacco, agricultural machinery, electrical machinery and apparatus, lubricating oil, coal, lard, and refined copper.

"There was a somewhat better foreign demand for unmanufactured cotton, especially from the Orient. Total shipments abroad amounted to 1,367,942,000

pounds, or nearly 8 per cent more than our exports for the first half of 1930.

"Leaf tobacco exports advanced from sixth to fourth place among our chief exports, owing to larger sales to many leading markets. During the first half of 1931 we exported 259,418,000 pounds, two per cent more than in the corresponding part of 1930 and 7 per cent above the 5-year-average."

Ask Bids for Hotel

Augusta, Ga.—The Burum Hotel Co., H. P. Burum and associates, which was to have opened bids October 23 for the construction of a \$500,000 hotel here, has extended the date to November 2, at which time bids will be opened in the office of Scroggs & Ewing, Augusta, architects for the building. W. C. Spiker & Co., Atlanta, are the engineers.

JOHN NUVEEN & CO.

First National Bank Building

CHICAGO

We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.

Write us if you have bonds for sale

HAVE YOU BONDS FOR SALE?

WE BUY ALL CLASSES OF MUNICIPAL BONDS, INCLUDING CITY, COUNTY, SCHOOL, PAVING, ROAD AND DRAINAGE

The Hanchett Bond Co. Inc.

39 SOUTH LA SALLE ST., CHICAGO

We Buy Bonds

City, County, School and Road from Municipalities and Contractors

WRITE

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J. Ernest Smith, President and General Counsel.
Chas. Warner Smith, Vice-President.
Harry W. Davis, Secretary and Treasurer.

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is the motto of this Bank.
Let us tell you about it.

BALTIMORE COMMERCIAL BANK

GWYNN CROWTHER, President

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PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS



Bids close October 23, 1931.

U. S. ENGINEER OFFICE, HUNTINGTON, W. VA.—Sealed bids will be received until 10 A. M., October 23, 1931, and then opened for constructing the second of two locks, powerhouse building and connection to old dam at Marmet, W. Va., on Great Kanawha River, nine miles above Charleston, W. Va. Further information on application.

Bids close October 27, 1931.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., October 5, 1931.—SEALED BIDS, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., October 27, 1931, for furnishing all labor and materials and performing all work for the construction of the U. S. post office, etc., at Georgetown, Del. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office, in the discretion of the supervising architect, by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close November 17, 1931.

DEPARTMENT OF THE INTERIOR, Washington, October 8, 1931. Sealed proposals in duplicate will be received at the Department of Interior until 2 o'clock p. m., Tuesday, November 17, 1931, for furnishing all labor and materials for constructing at St. Elizabeths Hospital, Washington, D. C., two continued treatment buildings Nos. 1 and 2 and one dining hall and kitchen building and connecting corridors, including roads, walks, grading and drainage. This work will include excavating, reinforced concrete construction, hollow tile, brick work, cut stone work, granite, architectural terra cotta, marble work, floor and wall tile, terrazzo floors, linoleum floors, iron work, steel sash, steel stairs, tile, metal and built-up roofing, roof ventilators, metal lathing, plastering, carpentry, metal weatherstrips, insect screens, window shades, painting, glazing, hardware, plumbing, refrigerating, heating and ventilating, electrical work, electric freight elevator, and outside service connections. Separate bids will be received for electric elevator and refrigerating plant, as per bid form. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract, and in making awards the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. Drawings and specifications may be obtained upon application to the Construction Division, Veterans' Administration, Room 764 Arlington Building, Washington, D. C. While no deposit on the plans is necessary, their prompt return following the opening of bids is required. Special attention is invited to requirements of the Act of March 3, 1931, regarding rate of wages, set forth in the specifications. Time of performance will be considered an element in awarding the contract. The right is reserved to reject any or all bids, waive technical defects, accept one part and reject the other as the interests of the Government may require. Proposals must be securely enveloped, marked "Proposal for construction of continued treatment buildings, St. Elizabeths Hospital," and be addressed to the Secretary of Interior, Washington, D. C. JOHN H. EDWARDS, Assistant Secretary.

GENERAL INFORMATION About Proposal Advertising in Manufacturers Record

PUBLICATION DAY: Thursday.
FORMS CLOSE: 10 A. M. Tuesday.

When too late to send copy by regular mail to reach us by 10 A. M. Tuesday, forward by night letter or air mail when possible

THE DAILY CONSTRUCTION BULLETIN OF THE MANUFACTURERS RECORD

Published every business day, gives information about the industrial, commercial and financial activities of the South and Southwest.

The Daily Construction Bulletin can be used to advantage when copy cannot reach us in time for publication in the Manufacturers Record before bids are to be opened or when daily insertions are necessary to meet legal requirements.

The rate is the same for both publications—35 cents a line each insertion.

Bids close November 10, 1931.

SEALED BIDS, in triplicate, subject to the conditions contained herein, will be received by the Veterans Administration, Room 764, Arlington Building, Washington, D. C., until 2:30 P. M., November 10, 1931, and then publicly opened, for furnishing all labor and materials and performing all work required for constructing and finishing complete at VETERANS ADMINISTRATION HOSPITAL, COLUMBIA, SOUTH CAROLINA, BUILDINGS AND UTILITIES, including roads, walks, grading and drainage. This work will include excavating, reinforced concrete, hollow tile, brick work, cut stone, cast stone, slate stair treads, marble work, terrazzo, floor and wall tile, rubber tile, compressed asphalt tile and linoleum floors, iron work, flag pole, steel sash, steel stairs, steel shelving, cabinets and partitions, slate, metal and built-up roofing, lighting conductors, roof ventilators, metal lathing, plastering, sound deadening, carpentry, metal weatherstrips, insect screens, platform scales, dumbwaiters, painting, glazing, hardware, plumbing, refrigerating and ice-making plant, radial brick chimney, heating and ventilating, electrical work, electric elevators, nurses call system, fire alarm system, and outside sewer, water, gas, steam and electric distribution systems. SEPARATE BIDS will be received for (a) General Construction, including Radial Brick Chimney; (b) Plumbing, Heating, Electrical Work and Outside Distribution Systems; (c) Electric Elevators; (d) Steel Water Tank and Tower; and (e) Refrigerating and Ice Making Plant; all as set forth on bid form. Bids will be considered only from individuals, firms or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract and, in making awards, the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. At the discretion of the Administrator, drawings and specifications may be obtained upon application to the Construction Service, Room 764, Arlington Building, Washington, D. C. While no deposit will be necessary, return of the drawings and specifications within ten days after date of opening bids will be required. In case no bid is to be submitted, the return of plans and specifications, as soon as this fact has been determined, and before the date for opening bids, is requested. Compliance with the requirement and with the request indicated will be considered in connection with future applications for drawings and specifications. FRANK T. HINES, Administrator. October 1, 1931.

Bids close November 12, 1931.

War Department, Office Constructing Quartermaster, Fort Bragg, N. C. Sealed proposals in triplicate will be received in this office until 10.00 A. M., November 12, 1931, and then publicly opened, for the construction and completion of concrete streets, combined curb and gutter, sidewalks, drainage and grading, at Fort Bragg, North Carolina. \$15.00 deposit certified check payable to Treasurer of United States required for plans and specifications. A certified check or bid bond for 10% of the amount of each bid will be required with each proposal. Further information on request.

Bids close October 26, 1931.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., October 3, 1931.—SEALED BIDS, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., October 26, 1931, for furnishing all labor and materials and performing all work for the construction (except elevators) of the U. S. post office, etc., at Altoona, Pa. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office, in the discretion of the supervising architect, by any satisfactory general contractor, and provided a deposit of \$25.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close October 21, 1931.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., September 23, 1931.—SEALED BIDS, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., October 21, 1931, for furnishing all labor and materials and performing all work for the construction of the U. S. post office at New Martinsville, W. Va. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office, in the discretion of the supervising architect, by any satisfactory general contractor, and provided a deposit of \$15.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close October 26, 1931.

TREASURY DEPARTMENT, office of the supervising architect, Washington, D. C., September 28, 1931.—SEALED BIDS, in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 3 p. m., October 26, 1931, for furnishing all labor and materials and performing all work for the construction (except elevators, dumbwaiter and interior lighting fixtures) of the U. S. post office building, including the demolition and removal of old building, at Waterbury, Connecticut. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding six sets, may be obtained at this office, in the discretion of the supervising architect, by any satisfactory general contractor, and provided a deposit of \$25.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. JAS. A. WETMORE, Acting Supervising Architect.

Bids close October 29, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 2, 1931—**SEALED BIDS** in duplicate subject to the conditions contained herein will be publicly opened in this office at 2 p. m., October 29, 1931, for furnishing all labor and materials and performing all work for changes in sewers in the U. S. post office, Greenville, S. C. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications may be obtained from the custodian at the building or at this office in the discretion of the supervising architect. **JAS. A. WETMORE**, Acting Supervising Architect.

Bids close October 20, 1931.

\$500,000 4 1/4% Road Bonds,

ALLEGANY COUNTY, MARYLAND
Postponement of Opening Bids: Previously Advertised to be Opened Sept. 29, 1931.

Cumberland, Md.
The County Commissioners of Allegany County, Maryland, will be in readiness to receive sealed bids at the office of the County Commissioners of Allegany County in the Court House, situated on Washington Street, in the City of Cumberland, Maryland, at 11 o'clock, October 20th, 1931, for an issue of Allegany County Bonds known as "Allegany County Road Bonds, Issue of 1931," amounting to FIVE HUNDRED THOUSAND (\$500,000.00) DOLLARS, at which time and place said bids will be opened by the Clerk of the County Commissioners in the presence of the County Commissioners of Allegany County.

The bonds will be dated July 1st, 1931, and will bear interest at the rate of four and one-quarter per centum (4 1/4%) per annum, payable semi-annually on the first days of January and July in each year. The principal and interest thereon will be payable in lawful money at the office of the Treasurer of Allegany County in Cumberland, Maryland.

The bonds will be in coupon form with the privilege of registration as to principal only, and will be issued in the denomination of One Thousand (\$1000.00) Dollars each, and in series according to their maturity, each series to be designated by a different letter, beginning with the letter "A," and a series (Series "A"), of said bonds to the amount of One Hundred Thousand Dollars shall mature and become payable One Year after the date of their issue and a like series (Series "B") to the amount of One Hundred Thousand Dollars Two Years after the date of their issue, and so on until the whole amount thereof shall have been redeemed so that the last series of the issue of said bonds shall fall due and become payable at the end of five years from the date of the issue thereof.

These bonds are authorized by Chapter 105 of the Acts of the General Assembly of Maryland, Session of 1931, and are exempt from all taxation in Maryland.

Bids may be made for all or any part of the issue. Each bid must be accompanied by a certified check drawn upon an incorporated bank or trust company for an amount equal to five per centum (5%) of the face value of the amount of bonds bid for, payable to the order of the Treasurer of Allegany County, which check shall be and become the property of Allegany County as liquidated damages upon the failure of the successful bidder to apply for and accept the bonds when ready for delivery. All other deposits will be returned to unsuccessful bidders immediately after the bonds have been awarded.

The bonds will not be sold for less than par and in addition to the amount bid the successful bidder must pay accrued interest at the rate borne by the bonds from the date of the bonds to the date of payment of the purchase price.

All bids, together with the security deposits, must be sealed and endorsed "Bid for Bonds" and enclosed in a sealed envelope directed to Thomas P. Richards, Clerk of the County Commissioners of Allegany County, Cumberland, Maryland.

The County Commissioners reserve the right to reject any and all bids.

Financial Statement of Allegany County:
Assessable basis\$92,076,623.05
Bonded indebtedness (not including this issue). No floating debt\$2,410,000.00

By order of the County Commissioners of Allegany County, Maryland.

A. CHARLES STEWART, President.
THOMAS P. RICHARDS, Clerk.

Bids close November 6, 1931.

TREASURY DEPARTMENT, Office of the supervising architect, Washington, D. C., October 9, 1931—**SEALED BIDS** in duplicate, subject to the conditions contained herein, will be publicly opened in this office at 2 p. m., November 6, 1931, for furnishing all labor and materials and performing all work for new brass water piping, etc., at the U. S. post office, Sharon, Pa. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications may be obtained from the custodian at the building or at this office, in the discretion of the supervising architect. **JAS. A. WETMORE**, Acting Supervising Architect.

Bids close October 22, 1931.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., October 6, 1931—**SEALED BIDS**, in duplicate subject to the conditions contained herein will be publicly opened in this office at 3 p. m., October 22, 1931, for furnishing all labor and materials and performing all work for the excavation and foundations of the U. S. post office at Philadelphia, Pa. The prevailing rate of wage shall be paid all laborers and mechanics employed on the project as provided in the Act of March 3, 1931 (Public No. 798). Drawings and specifications, not exceeding three sets, may be obtained at this office in the discretion of the supervising architect by any satisfactory general contractor, and provided a deposit of \$25.00 is made for each set to assure its prompt return. Checks offered as deposits must be made payable to the order of the Treasurer of the United States. Cash deposits will not be accepted. **JAS. A. WETMORE**, Acting Supervising Architect.

Bids close October 20, 1931.

Bridges

Baton Rouge, La.

Sealed Proposals for the construction of the following Projects will be received by the Louisiana Highway Commission, Room No. 614, Louisiana National Bank Building, Baton Rouge, Louisiana, until 9:45 A. M. on Tuesday, October 20, 1931. Proposals will not be received after this hour. At 10:00 o'clock A. M. of the same day and date they will be publicly opened and read in the Chamber of the Senate in the State Capitol Building.

(BOND F. R.) PROJECT NO. 677-B, BAYOU BIENVENUE BRIDGE, VERSAILLES-CHEF MENTEUR HIGHWAY. Located in Orleans & St. Bernard Parishes. Route No. 61. DESCRIPTION: 1-160 ft. swing span on concrete capped creosoted timber piles and 14-20 ft. combination I beam spans on creosoted timber piling, 20 ft. roadway. Charges for plans, \$2.50.

(BOND) PROJECT NO. 4907, WILLOW GLEN OVERHEAD CROSSING, T. & P. R. R., M. P. R. R. and C. R. I. & P. R. R., ALEXANDRIA-LECOMPT HIGHWAY. Located in Rapides Parish, Route No. 1. DESCRIPTION: A series of I beam spans of varying lengths on reinforced concrete framed bents and pile bents. Total length of spans 454 ft. Also 1700 ft. of approach fill and paving, 24 ft. roadway. Charges for plans, \$3.00.

(BOND) PROJECT NO. 6209, TANGIPAHOA RIVER BRIDGE AND APPROACHES, AMITE-FRANKLINTON HIGHWAY. Located in Tangipahoa Parish, Route No. 35. DESCRIPTION: 1-200 ft. steel fixed span on concrete piers; 102-19 ft. combination I-beam spans on creosoted timber piles, together with 2.4 miles grading and drainage structure construction, 24 ft. bridge roadway width. Charges for plans, \$3.00.

(BOND) PROJECT NO. 6804, BOGUE CHITTO RIVER BRIDGE AND APPROACHES, FRANKLINTON-AMITE HIGHWAY. Located in Washington Parish, Route Nos. 34 and 35. DESCRIPTION: 1-200 ft. steel fixed span on concrete piers; 2-50 ft. and 98-19 ft. combination I-beam spans on creosoted timber piles, together with 2.0 miles grading and drainage structure construction, 24 ft. bridge roadway width. Charges for plans, \$3.00.

Full information and proposal forms are available at the offices of the Highway Commission at Baton Rouge. Plans and Specifications may be inspected there or will be furnished upon payment of amounts specified above (not to be refunded).

HARRY B. HENDERLITE, State Highway Engineer.
O. K. ALLEN, Chairman, Louisiana Highway Commission.

Bids close October 23, 1931.

Street Paving

Fairhope, Ala., Sept. 25, 1931.

Sealed proposals will be received by the Town of Fairhope at the City Hall, Fairhope, Alabama, up to 7:30 o'clock P. M., on the 23rd day of October, 1931, at which time they will be opened and publicly read, for the constructing and improvement of approximately two and one-half (2 1/2) miles of street in Fairhope, Alabama. Payments for all work shall be made in (a) assessment bonds and or (b) general obligation bonds and or (c) cash, at the discretion of the Town of Fairhope. All work is to be done in accordance with the plans and specifications which are on file at the City Hall at Fairhope, Alabama, or may be obtained from the Clerk there by the payment of \$5.00 for each set of plans and specifications, which is not returnable.

A certified check or cash in the amount of five per cent (5%) of the total bid, made payable to the Town of Fairhope, or a bidder's bond must accompany each proposal.

The right is reserved by the Town of Fairhope to reject any or all bids, waive any informalities or irregularities, or to act in any way to the best interests of the Town of Fairhope.

TOWN OF FAIRHOPE
By: **GLADYS LOWELL**, Clerk.

Bids close October 20, 1931.

Maryland Highway Work

DEPARTMENT OF PUBLIC WORKS
STATE OF MARYLAND
STATE ROADS COMMISSION

NOTICE TO CONTRACTORS

Baltimore, Md.

SEALED PROPOSALS for building seven sections of State Highway as follows:

Harford County, Contract No. H-122-44—One section of State Highway along the Federal Hill-Bush's Corner Road, from the end of Contract No. H-80 to Bush's Corner, a distance of 2.15 miles, and from the Federal Hill-Bush's Corner Road toward Harkins, a distance of 0.53 mile, total 2.68 miles (Concrete).

Harford County, Contract No. H-139-42—One section of State Highway from the end of Contract No. H-56 at Perryman to Bush River, a distance of 0.8 mile (Macadam Resurfacing), and 1.97 miles (Gravel), total 2.77 miles.

Montgomery County, Contract No. M-173-34—One section of State Highway from Avenel toward White Oak, a distance of 1.21 miles (Macadam).

Montgomery County, Contract No. M-186-52—One section of State Highway from Old Germantown toward Boyds, a distance of 1.0 mile (Macadam).

Prince George's County, Contract No. P-195-311—Concrete Shoulders, combination curb and gutter along the Baltimore-Washington Boulevard in front of the property of the University of Maryland.

Worcester County, Contract No. W-106-111—One section of State Highway along Market Street in Pocomoke between Second and Fourth Streets, a distance of 720 feet (Concrete Shoulders).

Prince George's County, Contract No. P-196-811—One section of State Highway along the south side of Main Street, Upper Marlboro, for a distance of 0.26 mile (Concrete Shoulders, Combination Curb and gutter).

will be received by the State Roads Commission at its offices, Federal Reserve Bank Building, Calvert and Lexington Sts., Baltimore, Maryland, until 12 M. on the 20th day of October, 1931, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of \$1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check, payable to the State Roads Commission of Maryland, as required by Sec. 6, Chapter 539, Acts of 1931, of the amount as set forth in the proposal form.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

BY ORDER of the State Roads Commission this 6th day of October, 1931.

G. CLINTON UHL, Chairman.
L. H. STEUART, Secretary.

CLASSIFIED OPPORTUNITIES

MINERAL AND TIMBER LANDS, WATER POWER, MISCELLANEOUS PROPERTIES

FOR SALE—Gold-bearing tract of land in Alabama, 760 acres. Tested and proved. J. H. ALLDREDGE, Agent, Montgomery, Alabama.

KAOLIN

FOR SALE—Millions of tons of Pure White Kaolin. Vein 30 ft. thick three miles long. J. C. HARRISON & CO., Clarksville, Ark.

TRAVERTINE

FLORIDA TRAVERTINE, 34½ acres. Will sell outright or a cash deposit with royalty on the rock. B. CORBITT, 210 W. Curtis St., Tampa, Fla.

COAL LANDS AND MINES

COAL FOR \$2.50 PER ACRE
2000 ACRES 40 miles north Chattanooga on Southern Ry. and Dixie Highway; estimated over 20,000,000 tons; can truck direct to consumer, saving freight and rehandling charges; should net one to one fifty per ton. Price includes mining rights; also 600 acres timber for mining purposes. E. B. THOMASSON, Chattanooga, Tenn.

GLASS SAND DEPOSIT

57 ACRES, containing large deposit highest grade glass sand, near Winchester, Va. Quarry fully developed, also lot of sand plant equipment, damaged by fire which destroyed the plant. Sand from this deposit is unsurpassed for manufacturing fine glass ware.

D. H. SENCINDIVER,
Trustee,
Winchester, Va.

BUSINESS OPPORTUNITIES

I KNOW TEXAS
Unlimited Opportunities In
Manufacturing—Mining—Oil—
Write Me

A. R. ANDERSON, Box 2551, Dallas.

FOR SALE—Large Well-Drilling Business, now doing \$100,000 a year. Priced cheap. Selling due to ill-health. Everything fine order. Money Maker. Address No. 9136, care of Manufacturers Record, Baltimore.

CENTRALLY LOCATED SOUTHERN MANUFACTURER with large, well-equipped plant desires new line Iron-Steel products for manufacture. Address No. 9140, care of Manufacturers Record.

WEEKLY NEWSPAPER WANTED—Editor-manager now with daily will pay \$750 cash on "going" business in good location; balance secured by notes on property; must be place where hard work and good business judgment will be productive. Address No. 9143, care of Manufacturers Record.

MOVING AHEAD

Parkersburg has worked out of the depression. Diversified industry did it. Locate your factory here at the gateway to the Central West and South.

BOARD OF COMMERCE,
Parkersburg, West Virginia.

AN OPPORTUNITY IN THE SOUTH
Building Contracting Company with recognized ability and experience, located in thriving section of the South, desires connection with large Construction Organization, whereby its activities can be enlarged. Prefer connection as secret representative, which should prove of great benefit to both parties. If interested write us for particulars. Address No. 9141, care of Manufacturers Record, Baltimore, Md.

Rates, Terms and Conditions

RATES: 30 cents a line each insertion. Minimum space accepted, four lines. In estimating the cost allow six or seven words of ordinary length to line. When the advertisement contains a number of long words proper allowance should be made.

Rates for Special Contract:

100 lines 28c a line
300 lines 26c a line
500 lines or more 25c a line

TERMS: For transient advertising cash with order; check, post office or express money order or stamps accepted.

On special contract advertising bills are rendered monthly, covering space used each month, payable within ten days.

CONDITIONS: No patent medicine, oil or mining stock advertisements or questionable or undesirable advertisements will be accepted. The assistance of our readers in excluding undesirable advertisements is requested. No display type used.

FINANCIAL

WILL PAY \$5,000.00 for use of \$12,000.00 for 16 months, this sum to be used to purchase raw material—will also let party hold lein on merchandise until sum is paid back. Party may also have complete charge of all return of cash until his sum is paid in full. Address No. 9142, care Manufacturers Record, Baltimore, Md.

INDUSTRIAL PLANTS

FOR SALE—Up-to-date Canning Factory, also shell mill and storage combined. Fully equipped to can anything. Good water front. Two acres land attached. Reason for selling, owner dead. Terms liberal. GOODWIN PACKING CO.,
Oriental, N. C.

FOR SALE—Iron Works in Kansas, composed of Structural Steel Shop, Foundry, Machine and Sheet Iron Shop; established in 1902. Owners retiring. Annual business \$350,000 to \$400,000, net assets \$275,000. Will sell at sacrifice. Address No. 9128, care of Manufacturers Record, Baltimore, Md.

COTTON MILL

For Quick Sale
Exceedingly Cheap—Easy Terms
4 story, standard brick building.
28 tenant houses.
2 warehouses, one story brick.
8,512 spindles.
262 looms, 32", 36" and 40".
Powered with 380 H.P. new Diesel oil engine.
Good location as to labor, climate and operating conditions.
For further information, write No. 9127, care Manufacturers Record, Baltimore, Md.

FARM AND INDUSTRIAL SITES

FOR SALE—FARM AND INDUSTRIAL SITES. With River, Rail and Highway facilities; 20 miles above New Orleans. Inducements offered.
C. B. FERDON, Norco, La.

FACTORY SITES

MANUFACTURERS partially improved site of this vicinity, approximately one mile square; possesses every commercial, industrial and natural advantage requisite to the success of every kind of manufacturing; at least 5 years free taxes; a part of which value I will invest in interested concern.
ED LEA DAVIS,
Flatiron Bldg., Chattanooga, Tenn.

PATENT ATTORNEYS

PATENTS—Booklet free. Highest references. Best results. Promptness assured. WATSON E. COLEMAN, Patent Lawyer, 724 Ninth St., N. W., Washington, D. C.

PAUL B. EATON, Patent Attorney
1408-R Johnston Bldg., Charlotte, N. C.
1389 Press Building, Washington, D. C.
417 Wachovia Bldg., Winston-Salem, N. C.

FREE "PATENT PARTICULARS"
Sterling Buck, over 25 years Registered Patent Attorney. Prompt and thorough services. Suite M 629 F, Washington, D. C.

SEYMOUR & BRIGHT, Registered Patent Attorneys. Established 1876. PATENTS, TRADEMARKS, COPYRIGHTS. Prompt and thorough service. Suite 892, National Press Building, Washington, D. C.

PATENTS—Write for free papers, or send sketch or model and description of your invention, and I will send you information showing how to proceed to obtain a patent; no charge for this advice. M. H. Ford, registered patent attorney, 225 Bway., N. Y. City.

AGENCIES WANTED

WANTED TO REPRESENT AMERICAN MANUFACTURERS ON GOVERNMENT SALES

Twenty-two years experience in Government contract work, desires connection with manufacturing company for the purpose of promoting sales of supplies or equipment to the United States Government. References supplied. Address No. 9137, care of Manufacturers Record, Baltimore, Md.

REPRESENTATIVES WANTED

MEN WANTED who sell fire appliances, to handle a Gasoline Non-Explosive safety valve for use on all gasoline tanks and a line of one and five gallon Non-Explosive gasoline cans.
EMERSON ENGINEERING CORP.,
Alexandria, Va.

MEN WANTED

MANUFACTURERS' AGENT—Who can sell a new line of standardized sectional steel buildings. Must have contact with public utility and large industrial corporations and know building construction. References required. GEO. L. MESKER AND CO., Evansville, Indiana.

IF YOU ARE OPEN to overtures for new connection and qualified for a salary between \$2500 and \$25,000, your response to this announcement is invited. The undersigned provides a thoroughly organized service of recognized standards and reputation, through which preliminaries are negotiated confidentially for positions of the caliber indicated. The procedure is individualized to each client's personal requirements, your identity covered and present position protected. Established twenty-one years. Send only name and address for details.
R. W. BIXBY, INC.,
103 Downtown Bldg. Buffalo, New York

FOUNDRIES

STEEL CASTINGS
Rough or Machined.
W. W. PETTIS COMPANY,
Cincinnati, Ohio.

ALABAMA

Rudisill Foundry Company,
Anniston
Gray Iron Castings, Whiteway Standards, Mastarms, Soil Pipe and Fittings, Pressure Pipe Fittings, Manhole Frames and Covers.



RESALE DEPARTMENT

MACHINERY

EQUIPMENT

SUPPLIES



Peremptory Auction Sale Machinery and Equipment

OF THE

JAHNCKE DRY DOCKS, Inc.

St. Maurice Ave. and Bienvenue St.
New Orleans, La.

WEDNESDAY, OCTOBER 28, 1931,
AT 10 A.M.

ON THE PREMISES

The sale comprises: Le Blonde and Lodge & Shipley variable speed head lathes, Cincinnati shapers, radial drill presses and planers, Cincinnati electric grinders, Bement-Niles and Bradley hammers, Hilles & Jones 30-ft. forming rolls, Southwark plate punches and shears, radial post drills, electric portable welding outfits, tinsmith and woodworking machine tools, 440-volt electric A C motors, vises, blacksmith equipment, etc.

Pawling & Harnischfeger 70-ft. Electric Crane, standard gauge locomotive crane, Ingersoll air compressors, Westinghouse turbine generator sets, arbor presses, bolt and pipe threaders, power cold saws, mast and boom turning lathe, belting, time clocks, etc.

BY ORDER OF THE TODD ENGINEERING DRY DOCK & REPAIR CO., INC., OF NEW ORLEANS, OWNERS

Descriptive Illustrated Catalogue Upon Application to

I. B. RENNYSON

Auctioneer

347 Carondelet St., New Orleans, La.

IF IT'S NEW PIPE OR SECOND HAND

black or galvanized up to 12"—we have it. Cut and threaded to any length. SPECIAL: a carload of 3" or 4". Cheap at any time, rethreaded and coupled.

Your inquiry means—Another satisfied customer.

HUDSON PIPE AND SUPPLY COMPANY
34th Street and C. R. R. of N. J. Bayonne, N. J.

STEEL TANK and TOWER

190,000 Gallon Water Tank & Tower. Dismantled, Marked, Ready for erection. Weight approx. 90 Tons—Perfect Condition—Texas location.

ARTHUR S. PARTRIDGE
415 Pine St. St. Louis

Reach the Buyers

of used machinery and equipment through the

Resale Department

An advertisement in this department will help sell machinery being replaced or no longer needed in your plant.

Rates on Request

MANUFACTURERS RECORD
Baltimore, Md.

WANTED STEAM PUMP

WANTED — Approximately 6x8x12 vacuum steam pump for heating system. Second hand Marsh or Worthington.

F. L. Seely, Asheville, N. C.

TURBINE GENERATORS

2—1000 K.V.A. West. 6600 volt, 3600 r.p.m. condensing.
1—300 K.W. West. 440 volt—non-con.
1—300 K.W. G.E., 600 volt, condensing.
1—200 K.W. A.C., 440 volt, condensing.
2—100 K.W. G.E., 600 volt, non-con.

Nashville Industrial Corporation
Old Hickory, Tenn.

ICE MACHINE

York Ammonia Compressor
3 ton—used 3 years—5 H. P. A. C. motor \$300.00

ACKER DRILL CO.
Scranton, Pa.

STEEL BUILDING FRAME

60' wide, 180' long, 24' high. Also independent runway and 10 ton Niles A.C. Crane.
Near Roanoke, Va. Excellent Condition, marked for re-erection. Quick shipment. Low price.
Also splendid lot of Shepard A. C. Hoists, 1 to 6 tons.

N. B. PAYNE & CO.
25 Church St. N. Y. C.

LATHES

11"x5' South Bend, AC motor
12"x5' Seneca Falls, belt, draw-in attach.
14"x8' Lodge & Shipley, AC motor, chuck
16"x8' Lodge & Shipley, AC motor, 2 chucks
16"x8' Monarch, belt, Q.C.G.
20"x20' Lodge & Shipley, belt, chuck
24"x8' Lodge & Shipley, belt, Q.C.G.
28"x30' Harrington, belt, 25' centers
48"x16' Lodge & Shipley, AC motor, rap. trav.
38"-60"x32' McCabe, belt, taper attach.

O'BRIEN

Machinery Company
113 N. Third St. Philadelphia

—TRANSFORMERS— SALES AND REPAIR SERVICE

Quick Delivery and Low Prices

A complete stock of transformers 1 to 1000 kva. Modern methods make our repair service second to none. Special service on breakdown jobs.

All transformers guaranteed for one year.
Write for Catalog. No. 125-B.

The Electric Service Company, Inc.
"America's Used Transformer Clearing House"
212 Walnut St., Cincinnati, Ohio



Your bargains listed on these cards will start your idle machinery and surplus materials on the road to a quick sale. Careful description and low cash prices bring prompt results. These cards are consulted daily on our inquiries. How many do you need?

See our full page in the Manufacturers Record of September 10 and arrange with us to publish your bargains in our next full page. We have America's best bargains listed on these cards. Let us tell you what the cards say.

FOR QUICK RESULTS! List it with Machinery Record, Richmond, Va.

Subject—Generator unit 50 K.V.A. Erie Ball.
Name—Town of Williamston, N. C.
Address—Mr. G. H. Harrison, clerk.
Location of item—Williamston, N. C.
Date of Listing—August 25th, 1931.
Lowest Cash Price—\$300.00 F.O.B. cars.

PIPE

Rethreaded, reconditioned, guaranteed suitable for all practical purposes, furnished with new threads and couplings, 400,000 ft. in all sizes from 24" to 1/4" diam.

5000 ft. 8" NEW GALVANIZED CORRUGATED pipe in lengths 16 to 20 ft. suitable for exhaust drains, water systems, sewers, conduits, etc., complete with necessary sleeves.

Very attractive prices.

Marine Metal & Supply Co.
167 South Street, New York City

PIPE NEW SECOND HAND

Overhauled and Tested
New Threads and Couplings
Established 1904

**Albert & Davidson
Pipe Corp.**

Second Ave., 50th-51st St., Brooklyn, N. Y.
Telephone Sunset 1900

SURPLUS PIPE MACHINES FOR SALE:

- 1-18" Taylor & Wilson Motor Driven A. C. without Die Heads @ \$350.00.
- 1-4" Cox Motor Driven A. C. with 2 Landis Die Heads @ \$550.00.
- 1-2" Bignall & Keeler Motor Driven A. C. with Die Head @ \$175.00.
- 1-12" Saunders Belt Driven with Dies Complete @ \$575.00.
- 1-Acme Double Head Nipple Machine, 2" belt Driven, @ \$200.00.
- 1-Acme Double Head Nipple Machine, 1 1/2" Belt Driven, @ \$150.00.

Albert Pipe Supply Co., Inc.
Berry & North 13th St., Brooklyn, N. Y.
Greenpoint 9-8100

STEEL SHEET PILING NEW and USED

Rented - Sold - Bought
Stocks at principal points.

HYMAN-MICHAELS COMPANY
St. Louis CHICAGO New York
Houston San Francisco Seattle

IRON AND STEEL PIPE

Large quantity new and used Government material in excellent condition, ready for immediate shipment. Low prices.

CENTRAL PIPE & SUPPLY CO.
Box 1099 Charleston, W. Va.

Second Hand and New Wrought Steel **PIPE** Overhauled New Threads and Couplings
Also Cut to Sketch

Greenpoint Iron & Pipe Co., Inc.
187-205 Maspeth Ave. Brooklyn, N. Y.

RAILROAD AND CONTRACTORS' EQUIPMENT

Track Scales, Water Tank, etc., Railroad Crossing For Sale

- 1-Fairbanks 200,000 lb. capacity Standard Gauge Track Scales, complete.
- 1-75,000 gallon Steel Water Tank mounted on 90' steel latticed tower, complete and in first-class condition, with stand pipe.
- 1-Automatic cabin Interlocking, late type Railroad Crossing, 90-lb. rail, 90 degree angle single track. Complete and in first-class condition.

T. G. ADAMS MACHINERY CO.
220 W. Bay St., Savannah, Ga.
P. O. Box 1597

RELAYING RAILS—SWITCHES TRACK MATERIAL

THE PERRY BUXTON DOANE CO.
P. O. Box 5253 Boston, Mass.

FOR SALE AT RICHMOND, VA.

- 1-No. 4 Champion Jaw Crusher complete.
 - 1-No. 6 Gates crusher complete.
 - Type "B" high lift, 3/4 cu. yd. No. 2579 Erie Steam Shovel fully equipped for bank work. Also new 40' boom and clam shell bucket.
 - Byers "Bearcat" gasoline crane with 28'0" boom.
 - Ingersoll-Rand 5 1/2 x 5 Air Compressor, 2 paving breakers, 1 Jackhammer, 2 clay diggers, hose on Rubber Wheels in good condition.
 - 12 h.p. Jumbo gasoline engine.
 - 4 h.p. Novo Centrifugal Pumping outfit 3 x 2 1/2.
 - 7 h.p. Jumbo gasoline engine.
 - 5" Centrifugal Pump.
 - 4" Diaphragm pumping outfit, 2 h.p. Gas. Eng.
 - Miscellaneous contractors tools of all kinds.
 - 1-Diaphragm hand pump.
 - 6-Four Cylinder Autocar Dump trucks, 2 yd. bodies all steel as good as new.
 - Two wheel trailer, rubber tires.
 - Tee Rails 30-35-40-56-60 and 100 lb. No. 1 Relays.
 - Rebuilt Whitcomb locomotives, 3 to 25 tons. Equipment in first-class condition. Sell at very reasonable prices. Will rent the equipment.
- CONSOLIDATED STEEL PRODUCTS CO.**
1406 West Clay St. Richmond, Va.

We Represent—

Sullivan Machinery Company, Air Compressors and Air Tools.

Owen Arc Welder.

Dake Holsting Engines.

Ideal Electric Drills.

Case Industrial Tractors.

W. M. Smith Company Anti-Friction Babbitt.

Write for catalogs and prices.

W. M. Smith & Company
P. O. Box 1709 Birmingham, Ala.

FOR SALE AT A SACRIFICE:

- 1-10 Ton, 8-wheel, 40 foot boom, OSGOOD, Locomotive Crane, located at Rome, Ga.
- 1-15 Ton, 8-Wheel, 50 foot boom, BROWNING, Locomotive Crane, located at Anniston, Ala.
- 1-AMERICAN-LaFRANCE, Fire Truck, equipped with chemical tank, no pumper. Located at Anniston, Ala.
- 1-WHITE, Fire Truck, equipped with pumper and chemical tank, located at Anniston, Ala.
- 800-Hyatt Bearings, New, located at Anniston, Ala.
- 25-Ice Refrigerators, suitable for Hotels, Meat Markets, large size, five hundred pound ice capacity, located Anniston, Ala. Full details, condition, and price on request.
- 40-Thousand feet, new, brake lining, for trucks and autos, made by RUSCO, KAYBESTOS, CHAMPION. Located Anniston, Ala. Samples and price on request.

ALL THE ABOVE AT WONDERFUL BARGAINS
ANNISTON SCRAP MATERIAL CO., Inc.
P. O. BOX NO. 33, ANNISTON, ALA.

FOR SALE

P & H MODEL 206, GAS, CRAWLER DRAGLINE 45 FT. BOOM, FULL ENCLOSED STEEL CAB, 3/4 YD. BUCKET.

Byers, 10 tons capacity, full revolving crawler steam crane, 40 ft. boom. 12 yd. Western, heavy duty steel beam type 2-way dump cars, 19 ft. beds; NEW BODIES.

The above completely rebuilt and we can offer at an unusual bargain.

Have large assortment of modern locomotives 5 to 100 tons, all types, rebuilt and ready. Steam and gas shovels, etc.

Southern Iron & Equipment Co.
ATLANTA GEORGIA

Shovels or Cranes

FOR SALE

- 1-Factory rebuilt Lima 1 1/4 cu. yd. capacity. This machine can be equipped with either shovel, clamshell, dragline or drag shovel attachments. Very reasonably priced. Carries new machine guarantee. Located at Newark, N. J.
- 1-GENERAL 1/2-yd. combination shovel, backhoe, 2 buckets, and crane boom. Very good condition, located Long Island.
- 1-GA-2 Erie Gas Air Shovel. Fine condition and bargain. Located Newark, N. J.
- 1-Complete Shovel Attachment for Type "O" Thew. Also, attachment for Type B and B-2 Eries located in New Jersey. Decided bargains.
- 1-P & H 1 1/4 yd. Gas Shovel. Excellent condition, very attractive price. Located Newark, N. J.
- 1-Linn Tractor, 6 yd. capacity, with Waukesha Motor. Machine in very good condition. Priced to sell quickly. Located New York State.
- 1-Koehring 3/4 yd. Shovel. Excellent condition throughout. Located Newark, N. J.

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Lima, O., Office: **Eastern Office and Warehouse,**
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Wire or phone nearest office at our expense

RAILS NEW & RELAYING ALL WEIGHTS

Let us know your needs. We may have material in stock near you.

**WE BUY RAILS FIT TO RE-LAY
ROBINSON & ORR**

Columbia Bldg., 248 Fourth Ave., Pittsburgh, Pa.
New Frogs and Switches at low prices.

36" PORTABLE TRACK

25 lb. rails—7 steel ties per 15 ft. section. Over ten miles, located Ocala, Fla. Also locomotives, cars, cranes and shovels.

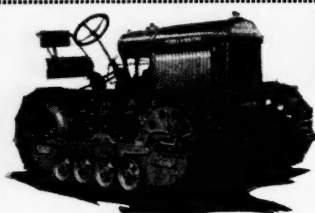
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EQUIPMENT CORPORATION OF AMERICA
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**SULPHURIC ACID
SUPERPHOSPHATE
TRIPLE SUPERPHOSPHATE
MANGANESE SULPHATE**

Manufactured and Distributed by
THE DAVISON CHEMICAL CO.
Main Office, Baltimore Trust Bldg., Baltimore, Md.

Main Plant, Baltimore; Pyrites Deposits Cienfuegos District, Cuba; Phosphate Rock Plant, Southern Phosphate Corporation, Bartow, Florida.

Plants Handling Complete Fertilizers and Fertilizer Materials: Maryland 11; Virginia 9; Pennsylvania 10; Georgia 2; Ohio 2; North Carolina 11; South Carolina, Mississippi, Louisiana, Texas, Indiana, West Virginia, Tennessee, Connecticut and New Jersey 1 each.



MODEL GH TRACKSON
McCORMICK-DEERING

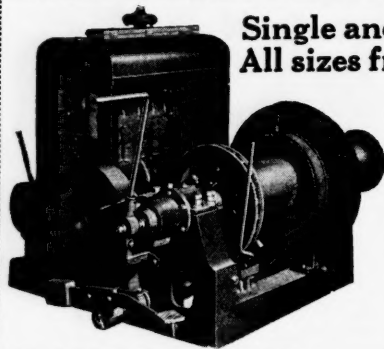
Extra heavy crawler frames, axles, truck wheels and bearings provide ample strength to withstand the added weight and strains of such equipment, and also to insure lower upkeep and longer life on the straight drawbar operations.

Trackson Company
FULL-CRAWLERS & TRACTOR EQUIPMENT
1325 South First St. Milwaukee, Wis.

**Built
Especially
for
Shovels
Bulldozers
Pipe Booms
Cranes, Etc.**

DAKE HOISTS-Gasoline & Electric

Single and Double Drum
All sizes from 2 to 27 h.p.



Are convenient, efficient, dependable and enduring. Rigid, sturdy construction insures lasting alignment. Interchangeable parts. Alemite lubrication. Low maintenance cost.

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DAKE Engine Company Grand Haven Michigan

Owen Buckets

Greater Digging Power
Faster Operation
Longer Life
Guaranteed Against
Breakage

The OWEN BUCKET CO.
4015 BREAKWATER AVENUE, CLEVELAND, O.

They get
"A Mouthful at Every
Bite" and More Bites
Per Day

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ERIE**

**BUCYRUS
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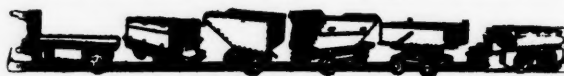
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Reliability!
Bucyrus-Erie are cutting costs in every part of the world. All sizes, types and powers of excavators. Railway cranes and "Lead-master."

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South Milwaukee, Wisconsin

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THE ATLAS CAR & MANUFACTURING CO.
Cleveland, Ohio

ALLIS-CHALMERS MFG. CO.

MILWAUKEE, WIS. U. S. A.

DESIGNERS AND BUILDERS OF

Steam Turbines, Electrical Machinery, Steam, Gas and Oil Engines, Centrifugal Pumps, Crushing & Cement Machinery, Etc.

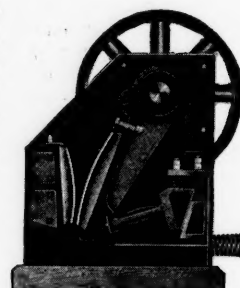
**GRUENDLER Roller Bearing All
Steel Fine Reduction CRUSHER**

for

**QUARRIES
ROAD MAINTENANCE
CONSTRUCTION WORK**
Stationary and Portable

Also manufacturers of complete Fertilizer Grinding and Mixing Machinery—Gravel Screening and Washing Plants—Elevating and Conveying Machinery.

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Crusher and Pulverizer Co.
2915 N. Market St., ST. LOUIS, MO.
Dept. M.



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Filling,
Land Reclamation,
Canals
and Port Work

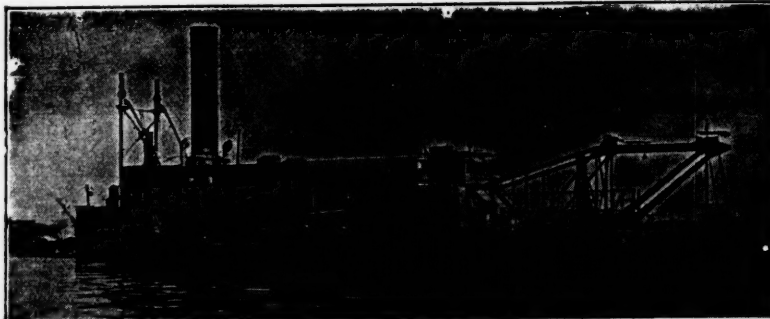
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LONGEST EXPERIENCE



We are especially equipped to execute all kinds of dredging, reclamation and port works in Southern waters.

CONTRACTORS
TO THE
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Atlantic, Gulf and Pacific Company

HOUSTON
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We produce in quantities to meet your requirements

SAND and WASHED GRAVEL

QUICK shipments by rail from Baltimore and North East, Md. or in scow and barge lots. Truck or rail shipments from Baltimore, Md.

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MAIN OFFICE: ARUNDEL BUILDING
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SAND—GRAVEL—BRICK FILTER GRAVEL

Washed Sand and Gravel for Concrete Roads and Buildings

Filter Gravel, all sizes—Building Bricks
FRIEND & CO., INC. River St., Petersburg, Va.



for economy and permanence in Road Building and General Construction

WOODSTOCK SLAG CORP.

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**Crushed Stone
Mascot Chatts Roofing Gravel
Asphaltic Roadway Gravel
Asphalt Filler Dust**



AMERICAN LIMESTONE COMPANY
KNOXVILLE TENNESSEE

Tamping Costs Go Down!

There's far less time put in on hand tamping when you put down the asphalt with an ERIE Roller—

Better clearance, easier steering, shorter turning radius allow the ERIE to get into the close places and compact the asphalt close to curbs, corners, man-holes, etc.

Write today for Bulletin "M".

ERIE MACHINE SHOPS
Erie, Pa.



ONE CLEAR FACT

... Out of a tangle of claims about gasoline ... one clear fact stands out ...

THAT GOOD GULF GASOLINE

is bought more places by more people in Gulf's 27 states because car owners buy on performance ... the only fact that counts.

GULF REFINING CO.



It is to the men already using Buffalo-Springfield Rollers that we direct you for a frank, unbiased opinion of their practical worth. They, of all men, can best explain why the Buffalo-Springfield is, and long has been, the leader among road rollers.

Various models, steam and motor driven. All practical sizes. Scarifier and other attachments when desired. Booklet upon request.

The Buffalo-Springfield Roller Co.
Springfield, Ohio

BUFFALO-SPRINGFIELD

Attention Manufacturers!

PARKERSBURG

is located directly on the

OHIO RIVER

the great inland waterway
serving the richest sec-
tions of this country.

MANUFACTURERS

are invited to establish
their plants here and have
the benefit of this trans-
portation for bulk freight.

Board of Commerce
PARKERSBURG, WEST VIRGINIA

LAND *For Sale or Rent* **On EAST COAST of FLORIDA**

Small or large tracts

For—Dairying

- Cattle Raising
- Truck Growing
- Citrus Fruits
- General Farming

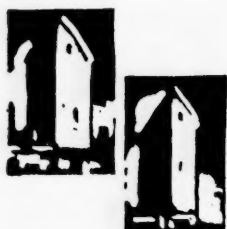
Let us know your requirements

MODEL LAND COMPANY

Flagler System

St. Augustine—Florida

*The late Henry M. Flagler and his organizations have served
Florida since 1886*



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8th and st. charles

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phone, fans, circulating ice water, in
every room. Club meals, Garage Serv-
ice, Coffee Shop. Room
and Bath \$3.00 to \$4.50 ● ●

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The A. & W. P.—W. Ry. of Alabama and
Georgia Railroads traverse a territory rich in
material and potential resources. Attractive
industrial sites. For information apply:

**Commercial and Agricultural
Dev. Dept.—Above Lines
Atlanta, Georgia**

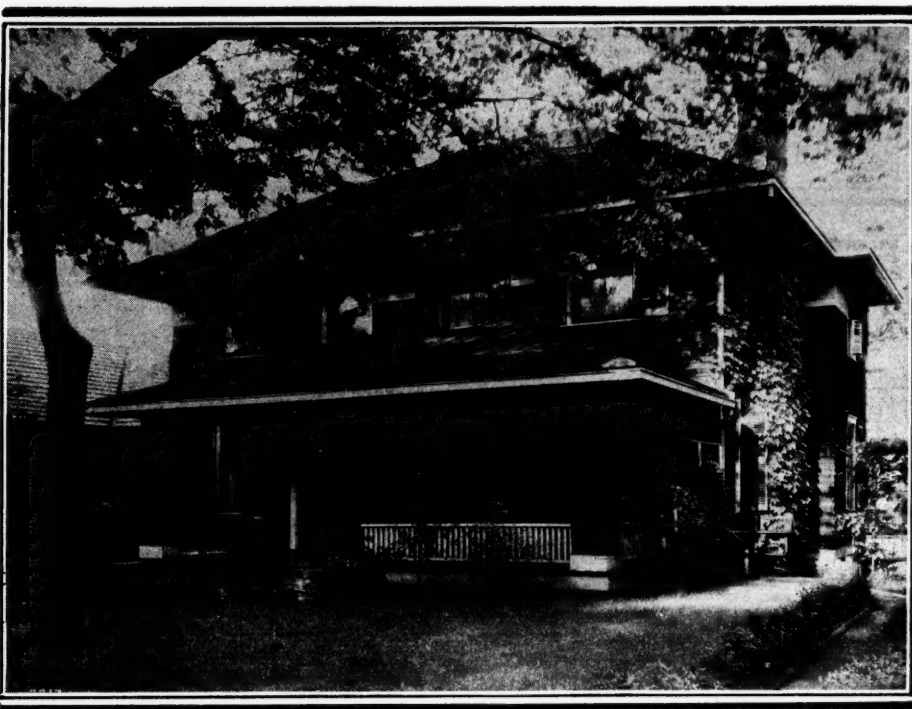
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Baltimore, Maryland

This residence of Mr. Logan Bleckley, Atlanta, Ga., is heated with natural gas, installed by the Atlanta Gas Light Company.



Natural GAS heat is clean, convenient and healthful

Cleanliness . . . convenience . . . health . . . these are three things of great importance in any modern home. Natural gas heat is a big factor in their realization.

The absence of smoke, soot and dust go a long way in keeping walls, curtains and floors clean . . . and also reduces laundry bills.

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The uniform temperatures reduce the number of winter "colds" . . . maintain a better state of general family health. The equipment is inexpensive and you will be surprised how low is the cost of a fuel with so many advantages.



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Virginia Bridge & Iron Co., Roanoke, Va.
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Virginia Bridge & Iron Co., Roanoke, Va.

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—(Roller.)

Timken Roller Bearing Co., Canton, Ohio.

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Flexible Steel Lacing Co., Chicago, Ill.

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Bristol Steel & Iron Works, Inc., Bristol, Va.
Converse Bridge & Steel Co., Chattanooga, Tenn.
Ingalls Iron Works Co., Birmingham, Ala.
McClintic-Marshall Co., Pittsburgh, Pa.
Roanoke Iron & Bridge Works, Roanoke, Va.
Virginia Bridge & Iron Co., Roanoke, Va.

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Owen Bucket Co., The, Cleveland, Ohio.
Williams Company, G. H., Erie, Pa.

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Owen Bucket Co., Cleveland, O.

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Owen Bucket Co., The, Cleveland, Ohio.
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Williams Company, G. H., Erie, Pa.

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—(Material Handling.)

Owen Bucket Co., Cleveland, O.

—(Ore Handling.)

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—(Rehandling.)

Owen Bucket Co., Cleveland, O.

—(Sand and Gravel.)

Owen Bucket Co., Cleveland, O.
Williams Company, G. H., Erie, Pa.

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Blaw-Knox Co., Pittsburgh, Pa.
Ingalls Iron Works Co., Birmingham.
McClintic-Marshall Co., Pittsburgh, Pa.
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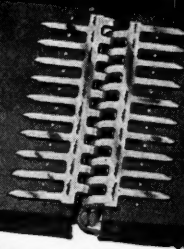
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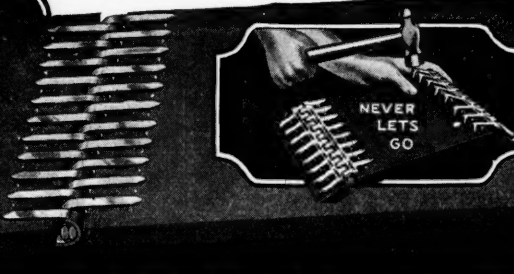
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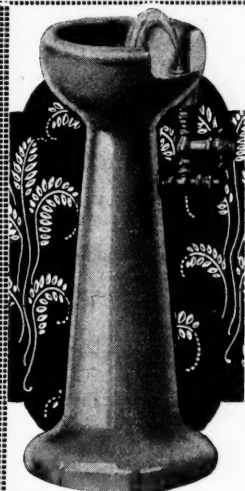
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—Tipples.
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—Washers.
Steward Machine Co., Chas. C., Birmingham, Ala.

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Warner Service Co., Knoxville, Tenn.
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Smallman-MacQueen Construction Co., Birmingham.
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White Engineering Corp., J. G., New York.

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Poe Piping & Heating Co., Greenville, S. C.
Power Piping Co., Pittsburgh, Pa.

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Virginia Engineering Co., Inc., Newport News, Va.

—(Railroad.)
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Thew Shovel Co., The, Lorain, Ohio.

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Thew Shovel Co., The, Lorain, Ohio.

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Thew Shovel Co., The, Lorain, Ohio.

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Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

—(Locomotive.)
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Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

—(Material Handling.)
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Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.
Universal Crane Co., Lorain, Ohio.

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Atlantic Creosoting Co., Norfolk, Va.

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Brown Wood Preserving Co., Louisville, Ky.

CREOSOTE OIL.
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Ayer & Lord Tie Co., Inc., Chicago.

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Amer. Creosoting Co., Inc., Louisville, Ky.
Atlantic Creosoting Co., Norfolk, Va.
Brown Wood Preserving Co., Louisville, Ky.
Eppinger & Russell Co., New York, N. Y.
Gulf States Creos. Co., Hattiesburg, Miss.

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Atlantic Creosoting Co., Norfolk, Va.
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—(Zinc Meta Arsenite Treated.)
Curtin-Howe Corp., New York, N. Y.

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Steward Machine Co., Chas. C., Birmingham, Ala.

—(Rock.)
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Universal Crusher Co., Cedar Rapids, Ia.

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Fuller Lehigh Co., Fullerton, Pa.
Gruendler Crusher & Pulverizer Co., St. Louis, Mo.
Universal Crusher Co., Cedar Rapids, Ia.

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Cast Iron Pipe Research Assn., Chicago.
U. S. Pipe & Foundry Co., Burlington, N. J.

—(Corrugated Metal.)
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National Tube Co., Pittsburgh, Pa.

—(Creosoting.)
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Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.

DOORS (Bronze.)
Michaels Art Bronze Co., Covington, Ky.

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Wilson Corp., The J. G., New York.

—(Kalamain and Hollow Metal.)
Cincinnati Mfg. Co., Cincinnati, O.

—(Revolving.)
Michaels Art Bronze Co., Covington, Ky.

—(Rolling, Steel and Wood.)
Wilson Corp., The J. G., New York.

—(Vault.)
York Safe & Lock Co., York, Penna.

DRAFTSMEN'S SUPPLIES.
Weber Co., Inc., F., Philadelphia, Pa.

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Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

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Bay City Shovels, Inc., Bay City, Mich.
Bucyrus-Erie Co., So. Milwaukee, Wis.

DREDGING (River and Harbor Improvement.)
Arundel Corp., The, Baltimore, Md.
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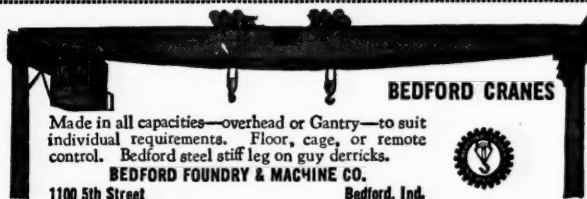
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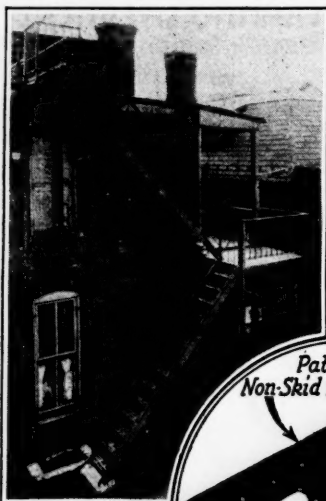
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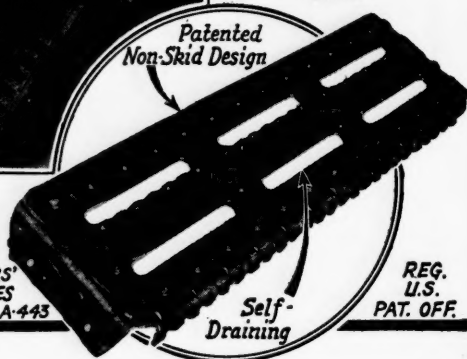
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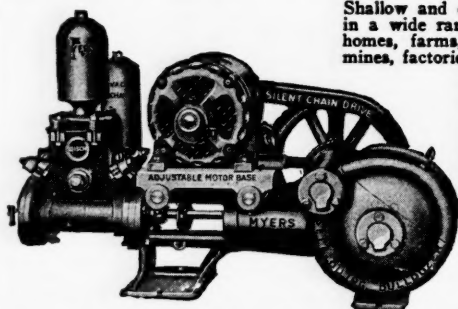
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Chicago Bridge & Iron Wks., Birmingham.
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Greensport's Sons Iron & Steel Co., St.
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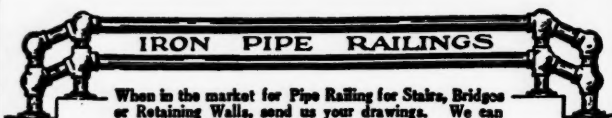
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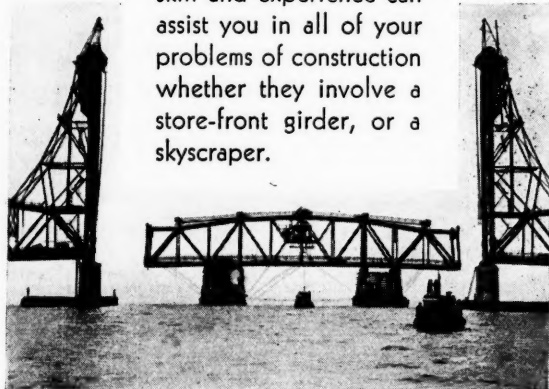
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Eastern Plant: Verona, Pa. (in Pittsburgh Dist.)
Branch Sales Offices: New York, New Orleans, Tampa, Charlotte, N. C., Tulsa, Jackson, Miss.

... STANDARD ... STEEL BUILDINGS

SCREW-Machine Products.
Progressive Mfg. Co., Torrington, Conn.

SCREWS (Machine.)
Progressive Mfg. Co., Torrington, Conn.

SEAWALLS.
Shore-Line Builders, Inc., Jacksonville, Fla.

SEWAGE Disposal Apparatus.
Pacific Flush-Tank Co., New York, N. Y.

—Disposal System.
D-N Corporation, Winston-Salem, N. C.

SEWER Joint Compounds.
Leadite Co., Philadelphia, Pa.
Pacific Flush-Tank Co., New York, N. Y.

—Pipe (Vitrified.)
Bannon Pipe Co., Louisville, Ky.
Lee Clay Products Co., Clearfield, Ky.
Owensboro Sewer Pipe Co., Owensboro, Ky.

SHAFTING Material (Tubular.)
National Tube Co., Pittsburgh, Pa.

SHARPENING Stones.
Carborundum Co., Niagara Falls, N. Y.

SHEET Metal Working Machinery.
Bliss Co., E. W., Brooklyn, N. Y.
Whitney Metal Tool Co., Rockford, Ill.
Yoder Co., The, Cleveland, Ohio.

—Steel and Iron.
American Sheet and Tin Plate Co., Pittsburgh, Pa.
Bethlehem Steel Co., Bethlehem, Pa.
Gulf States Steel Co., Birmingham, Ala.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Youngstown Sheet & Tube Co., Youngstown, O.

SHEETS (Asbestos.)
Ruberoid Co., New York City.

—(Galvanized and Black.)
American Rolling Mill Co., Middletown.
American Sheet & Tin Plate Co., Pittsburgh, Pa.

SHINGLES (Asbestos.)
Ruberoid Co., New York City.

SHIPBUILDING.
Charleston Dry Dock & Machine Co., Charleston, S. C.
Newport News Shipbuilding & Dry Dock Co., Newport News, Va.

SHOVELS (Steam, Gas and Electric Power.)
Bucyrus-Erie Co., So. Milwaukee, Wis.
Northwest Engineering Co., Chicago, Ill.
Ohio Power Shovel Co., Lima, Ohio.
Thew Shovel Co., The, Lorain, Ohio.

SHUTTERS (Steel.)
Merchant & Evans Co., Philadelphia, Pa.

SIGNALS. (Danger.)
Consolidated Iron-Steel Mfg. Co., Cleveland, O.

SILICATE OF SODA.
Grasselli Chemical Co., Inc., Birmingham.

SITES (Manufacturing.)
Atlanta and West Point B. E., Atlanta.
Central of Georgia Rwy., Savannah, Ga.
Crisp County Power Commission, Cordele, Ga.
Galveston, City of Galveston, Texas.
Missouri-Kansas-Texas Lines, Dallas, Tex.
Model Land Company, (Flagler System), St. Augustine, Fla.
Norfolk & Western Railway, Roanoke, Va.
Petersburg, W. Va., Board of Commerce.
Reynolds Bros. Lbr. Co., Albany, Ga.
Southern Natural Gas Corp., Birmingham.
Texas Power & Light Co., Dallas, Texas.

SLAG, For Concrete.
Woodstock Slag Corp., Birmingham, Ala.

—(Furnace.)
Woodstock Slag Corp., Birmingham, Ala.

SLINGS (Wire Rope.)
American Steel & Wire Co., Chicago, Ill.
Boehling's Sons Co., John A., Trenton, N. J.

SLUICE GATES AND APPLIANCES.
Smith Co., S. Morgan, York, Pa.

SPEED REDUCERS.
Earle Gear & Mach. Co., Phila., Pa.

SPIKES, (Railroad, Ship.)
Bethlehem Steel Co., Bethlehem, Pa.
Sweet's Steel Co., Williamsport, Pa.

SPREADER (Surfacing Material)
Gillie Machine Co., Tonawanda, N. Y.

SPRINGS (Machinery, Railway, Spiral Steel.)
American Steel & Wire Co., Balto., Md.

—(Wire—All Kinds.)
American Steel & Wire Co., Balto., Md.

SPRINKLERS (Automatic Fire.)
Moore Pipe & Sprinkler Co., Jacksonville, Fla.
Southern Automatic Sprinkler Co., Birmingham.

SPROCKETS.
Diamond Chain & Mfg. Co., Indianapolis, Ind.

STACKS (Iron and Steel.)
Birmingham Boiler and Engineering Co., Birmingham, Ala.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Chicago Bridge & Iron Wks., Birmingham.
Downington Iron Works, Downington, Pa.
Hedges Walsh Weldner Co., Chattanooga, Tenn.
Ingalls Iron Works Co., Birmingham, Ala.
Lombard Iron Works & Supply Co., Augusta, Ga.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Schofield's Sons Co., J. S., Macon, Ga.
U. S. Pipe & Foundry Co., Burlington, N. J.
Virginia Bridge & Iron Co., Roanoke, Va.

STAINS (Shingle, Woodwork.)
Cabot, Inc., Samuel, Boston, Mass.

STAIR TREADS.
Central Iron & Steel Co., Harrisburg, Pa.

STANDPIPES.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Chicago Bridge & Iron Wks., Birmingham.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.

STATIONERS (Envelopes, Letter and Billheads, etc.)
Smith & Son Co., Oscar T., Baltimore, Md.
Young & Selden Co., Baltimore, Md.

STEAM (Specialties.)
Lunkenheimer Co., The Cincinnati, O.
Mueller Co., Decatur, Ill.

STEEL.
Bethlehem Steel Co., Bethlehem, Pa.
Central Iron & Steel Co., Harrisburg, Pa.
Dietrich Brothers, Baltimore, Md.
Gulf States Steel Co., Birmingham, Ala.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
Oliver Iron & Steel Corp., Pittsburgh, Pa.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.

—(Alloy.)
Timken Roller Bearing Co., Canton, Ohio.

—(Cold Rolled.)
American Steel & Wire Co., Balto., Md.

—(Fabricators.)
United Welding Co., Middletown, O.

—(Special Analysis.)
Timken Roller Bearing Co., Canton, Ohio.

—(Tool, High Speed.)
Bethlehem Steel Co., Bethlehem, Pa.

—Buildings (Designers and Builders.)
American Bridge Co., New York, N. Y.
Belmont Iron Works, Philadelphia, Pa.
Carolina Steel & Iron Co., Greensboro, N. C.
Ingalls Iron Works Co., Birmingham, Ala.
McClintic-Marshall Co., Pittsburgh, Pa.
Phoenix Iron Co., The, Phila., Pa.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Virginia Bridge & Iron Co., Roanoke, Va.

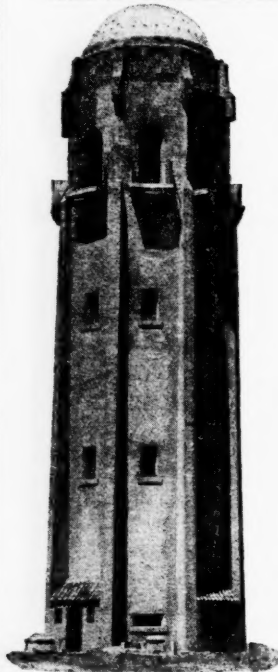
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Carolina Steel & Iron Co., Greensboro, N. C.
Central Iron & Steel Co., Harrisburg, Pa.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Chicago Bridge & Iron Wks., Birmingham.
Downtown Iron Works, Middletown, Pa.
Hedges Walsh Welder Co., Chattanooga, Tenn.
Ingalls Iron Works Co., Birmingham, Ala.
Phoenix Iron Co., The Phila., Pa.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Schofield's Sons Co., J. S., Macon, Ga.
United Welding Co., Middletown, O.

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Babcock & Wilcox Co., The, New York.
Detroit Stoker Company, Detroit, Mich.

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Austin Bros. Bridge Co., Atlanta, Ga.
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Bristol Steel & Iron Works, Inc., Bristol, Va.
Carroll Steel Co., Pittsburgh, Pa.
Carolina Steel & Iron Co., Greensboro, N. C.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Converse Bridge & Steel Co., Chattanooga, Tenn.
Dietrich Brothers, Baltimore, Md.
Ingalls Iron Works Co., Birmingham, Ala.
Jones & Laughlin Steel Corp., Pittsburgh, Pa.
McClintic-Marshall Co., Pittsburgh, Pa.
Phoenix Iron Co., The Phila., Pa.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Roanoke Iron & Bridge Works, Inc., Roanoke, Va.
Ryerson & Son, Inc., Jos. T., St. Louis and New York.
Sneed Architectural Iron Works, Louisville, Ky.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.
Virginia Bridge & Iron Co., Roanoke, Va.

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Grasselli Chemical Co., Inc., Birmingham.

SULPHIDE OF SODA.

Grasselli Chemical Co., Inc., Birmingham.

SULPHURIC ACID.

Davison Chemical Co., The, Balto., Md.
Du Pont de Nemours & Co., Inc., E. I., Wilmington, Del.

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Babcock & Wilcox Co., The, New York.

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—(Quantity.)

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Dake Engine Co., Grand Haven, Mich.

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General Electric Co., Schenectady, N. Y.

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Virginia Bridge & Iron Co., Roanoke, Va.

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Chicago Bridge & Iron Wks., Birmingham.
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Downtown Iron Works, Middletown, Pa.
Finnigan Co., Inc., J. J., Atlanta, Ga.
Lambert Iron Works & Supply Co., Augusta, Ga.
McClintic-Marshall Co., Pittsburgh, Pa.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Schofield's Sons Co., J. S., Macon, Ga.
Titusville Iron Works Co., Titusville, Pa.
Virginia Bridge & Iron Co., Roanoke, Va.
Westinghouse Traction Brake Co., Wilmerding, Pa.

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—(Seamless Steel.)

National Tube Co., Pittsburgh, Pa.

—(Storage, Oil, etc.)

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Birmingham Boiler & Engr. Co., Birmingham, Ala.
Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
Chicago Bridge & Iron Wks., Birmingham.
Downtown Iron Works, Middletown, Pa.
Ingalls Iron Works Co., Birmingham, Ala.
Pittsburgh-Des Moines Steel Co., Pittsburgh, Pa.
Titusville Iron Works Co., Titusville, Pa.
United Welding Co., Middletown, O.

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United Cork Companies, Lyndhurst, N. J.

—(Floor.)

Hood Co., B. Miffin, Daisy, Tenn.

—(Roof.)

Hood Co., B. Miffin, Daisy, Tenn.

—(Sewer.)

Lee Clay Products Co., Clearfield, Ky.

TIMBER (Creosoted.)

Amer. Creosote Wks., Inc., New Orleans.
Amer. Creosoting Co., Inc., Louisville, Ky.

TIN AND TERNE PLATES.

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Youngstown Sheet & Tube Co., Youngstown, Ohio.

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Ripley Foundry & Machine Co., Ripley, O.

TORCHES. (Contractors.)

Consolidated Iron-Steel Mfg. Co., Cleveland, O.

TOWERS (Electric Transmission.)

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Bessemer Galvanizing Works, Birmingham, Ala.

—(Radio).

Hessemer Galvanizing Works, Birmingham, Ala.

—(Steel and Wood.)Chattanooga Boiler & Tank Co., Chattanooga, Tenn.
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Sweet's Steel Co., Williamsport, Pa.**TRACTORS (Industrial.)**Atlas Car & Mfg. Co., The, Cleveland, O.
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Mueller Co., Decatur, Ill.
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La Bour Co., Elkhart, Ind.

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Glamorgan Pipe & Fdry. Co., Lynchburg, Va.

Leadite Co., Philadelphia, Pa.

Mueller Co., Decatur, Ill.
U. S. Pipe & Foundry Co., Burlington, N. J.

Wood & Co., R. D., Philadelphia, Pa.

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Hedger-Walsh-Weldner Co., Chattanooga, Tenn.

Newport News Shipbuilding & Dry Dock Co., Newport News, Va.
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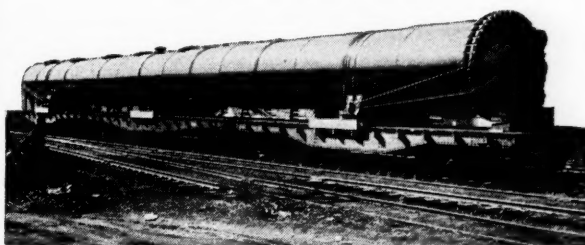
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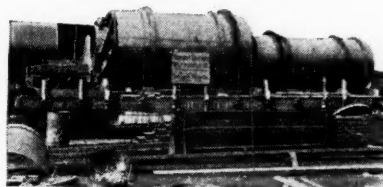
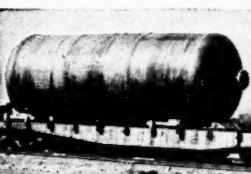
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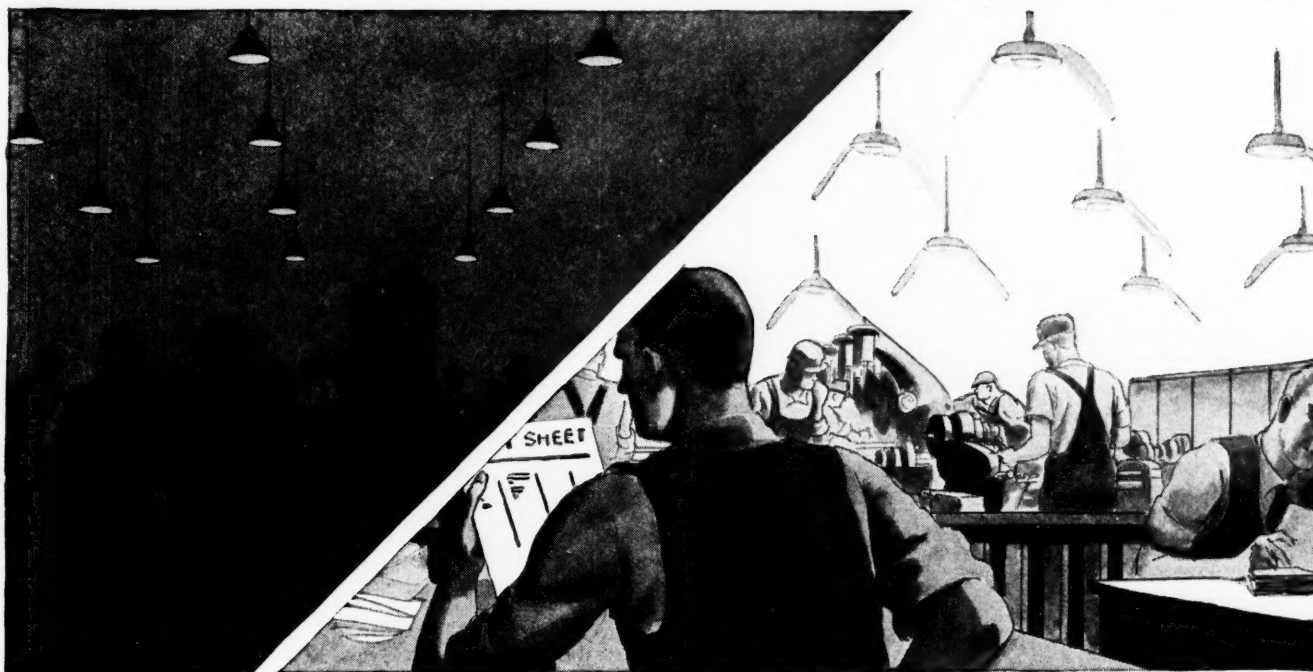
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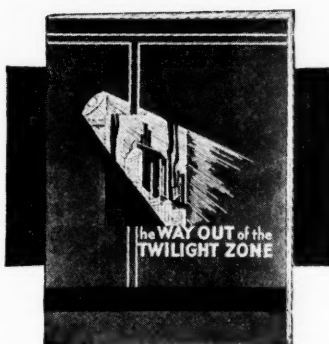
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Lighting Specialists of the local light and power company or of the Westinghouse organization know how to design lighting installations that must prove their value by their benefits to you. They are always ready to assist you in solving *Twilight Zone* problems.

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An illustrated book, "The Way Out of the *Twilight Zone*" will be sent to anyone interested in cutting costs with light. Write Westinghouse Lamp Company, Department 203, 150 Broadway, New York, N. Y.

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Westinghouse





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**STRENGTH
THAT
LASTS**

**Treated
by the Lowry Process -**

The Lowry Process of preserving timber has proved its superior worth wherever long time performance records are kept. Essentially, it consists of impregnating the wood with creosote oil as deeply as possible under pressure and then withdrawing the excess oil in the wood cells; leaving the preservative in the cell walls but withdrawing the excess oil. This minimizes "bleeding" and provides an economical and effective protection.

The American Creosoting Company has operated for 25 years on the same basic principles and the performance records of its product fully justify adherence to the Lowry Process. This is another of the several reasons why AmCreCo poles deserve the description "strength that lasts."

If you are interested in economical pole line construction, a booklet on "Poles with strength that lasts" is available. We will gladly send you a copy and quote on AmCreCo poles for any of your requirements.

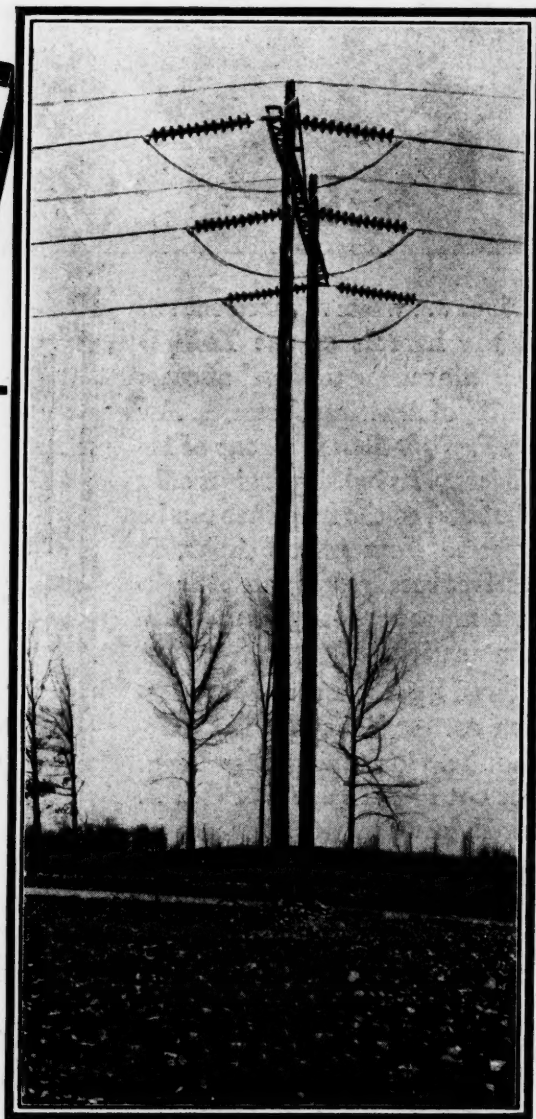
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